

sarnikon

one stop shop
all in one hand

Türkiye / İstanbul / Ataşehir
Ferhatpaşa Mh. 14. Sk. No: 12

www.sarnikon.com

Product Catalogue

2023/2

sarnikon

one stop shop
all in one hand

Sarnikon
Metal ve Elektronik A.Ş.

Head Office

Ferhatpaşa Mah.
14. Sok. No:12
Ataşehir • İstanbul
34888 Türkiye
+90 216 471 71 97
+90 216 471 71 66 (Fax)
info@sarnikon.com

Factory

Eyüp Sultan Mah.
İbni Sina Cad. No: 22
Sancaktepe • İstanbul
34885 Türkiye
+90 216 471 40 07

www.sarnikon.com

NANOPTIQS

OSRAM
Digital Lighting System

amul

OSRAM

TYF LED
同一方

LIFUD

KHATOD
Optical Solutions for LED Lighting

WAGO

sarveks

Index

About Us (5)

The Process (5)

PCP Assembly (SMT & Through Hole) (6)

Aluminum Heatsink & Housing (7)

Aluminum Heatsink & Housing (9)

Outdoor Lighting Housing (10)

Indoor Lighting Housing (22)

Component Heatsinks (31)

Led Chip (37)

Mid Power LED Chip (38)

High Power LED Chip (39)

Colour LED Chip (41)

Horticulture LED Chip (42)

Led Modules (45)

Indoor - Outdoor Lighting LED Module (46)

Led Lighting Components (71)

LED Driver (71)

Sarneks LED Driver (72)

Osram LED Driver (74)

Lifud LED Driver (86)

Lens (91)

Nanoptiqs (92)

Khatod Lens (93)

Darkoo Lens (96)

Wago Connector (97)

sarnikon

DEPO
ÖNÜ
ARAÇ
ÇIKILIR

About Us

Since its founding in 2007, Sarnikon is headed on its way with an experienced staff, perfect service mentality, having adopted the principle of being the actual solution on for its precious customers and always shaping its future on such foundation. The company's success is largely built upon its commitment to maintain close business partnerships with suppliers and customers,

coupled with the strength of its commercial and technical competencies through all stages of the design-production cycle. Sarnikon prioritizes quality, qualified labor and customer satisfaction in manufacturing organization on structured for meeting the requirement of aluminum heatsink, electronic material, LED and LED arranged on PCB.

The Process

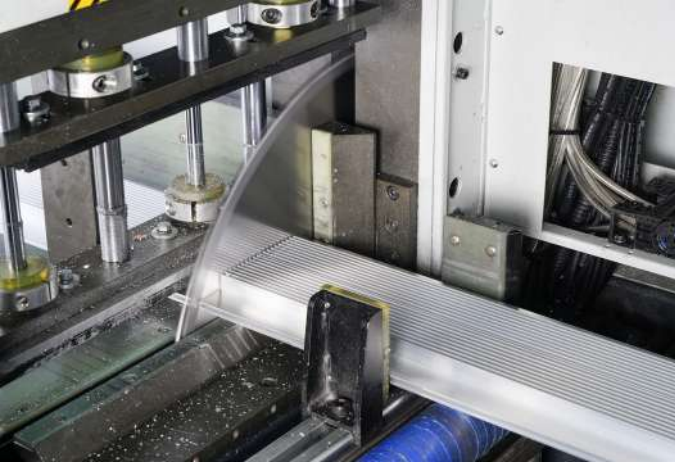
Our Solutions

We know that to remain viable in today's industry, companies need quality, integrated, and efficient solutions. That's why Sarnikon's total solutions include and extend beyond our equipment. By synergistically uniting the talents of engineering, and after-market support, we're able to provide your company with an array of solutions from component parts, technical support and engineering services and custom design.

With respect to aluminum heatsinks and housing, we have 44 patented products which we design. Except the domestic market, these products are also

being exported to more than 50 different countries. Our company boasts the most knowledgeable sales team and provides the most advanced engineering/ design capabilities and technical solutions. Sarnikon serves regions of the world and segments of the technology product lifecycle. Company shares purpose of guiding today's ideas into tomorrow's technology. As it's within our innovative and self-development focused structure, we always aim to be the best; starting from our establishment we are getting closer to our objective step by step by prioritizing customer satisfaction.





Aluminium Heatsink and Led Fixture Production

Our electronic cooler production facility which has cutting, CNC, welding, drilling, washing and packaging lines make production in high quality standards with the latest technology equipment. Our production line with 29 personnel specialized in their own fields produces an average of 25.000 products per month.

As Sarnikon, we export to 70 countries on 5 continents. We provide services to more than 350 customers in aluminum case, aluminum cooler and thermal solutions.

Our main production areas are; Street Lighting Heatsink, Tunnel Lighting Heatsink, Wallwasher Lighting Heatsink, Interior Lighting Heatsink, Canopy Lighting Heatsink, Decorative Lighting Heatsink, Electronic Component Heatsink.

With 44 patented products, we offer quality solutions in many areas. In addition, we have the ability to produce special design products starting from the project and test stage in accordance with customer demands.





- PCB Assembly (SMT & Through Hole)
- Highly reliable electronics assembly
 - One-stop solution
 - We do care about human health and quality.



- Aluminum Heatsink & Housing
- Die casting - Extruded - High Fin
 - Forging Custom Design
 - Indoor-Outdoor Product



- Corporate & Logistics
- Electronic components supply
 - Distributors of electronic components in the world
 - Searching of cross reference.



PCB Assembly (SMT & Through Hole)

Our aim; to provide our customers with a product that will truly meet the warranty requirements, especially in LED Modules besides to meet the demands of our customers more and faster.

In order to make the existing production site a clean and hygienic environment, we established ventilation systems and established a substructure with a low electrical load, humidity and dust value in the environment with epoxy floor supported by ESD (antistatic).

Lead free solder paste we use in production is the same brand as the solder used in Apple products and shows the quality we prefer and the importance we give to human health.

We are proud to exhibit an innovative and reliable development with our products thanks to our R&D efforts with our team with high knowledge and experience.

Our line production line is 30m long and combines the final test parts with all the auto controls needed for production. In particular, our quality control with Omron-branded optical inspection machine, which is located in only a few companies in Turkey, is at the highest level.

Thanks to the new technology, our typesetting machine is able to typesetting from the 01005 Inc component to the 15cm connector.



"Sarnikon offer combine solutions so you can move forward faster instead to reinvent the wheel again."



Aluminium Heatsink & Housing

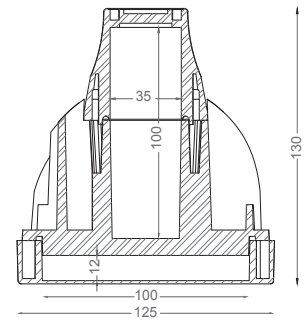
Outdoor Lighting HOUSING

We reserve the right to change dimensions.

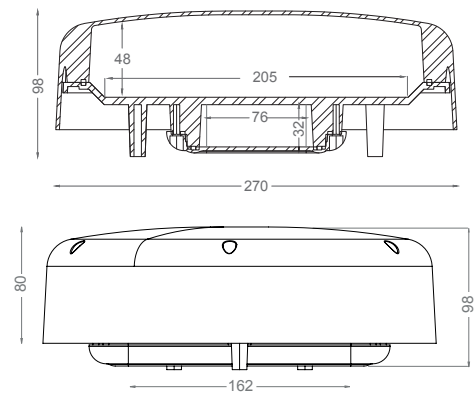


PARK & GARDEN LIGHTING

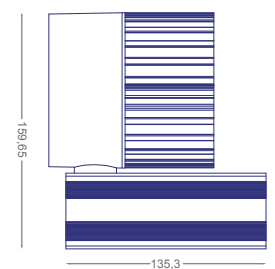
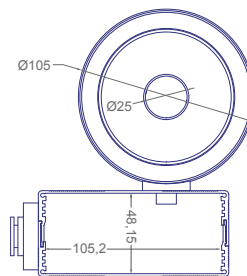
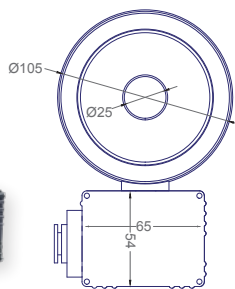
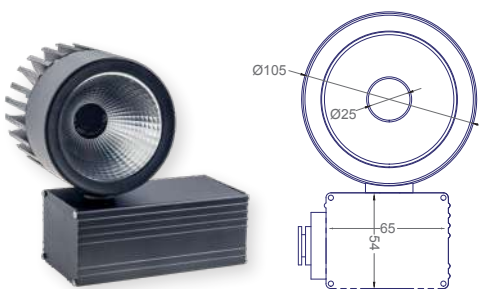
DL-30



BULK HEAD



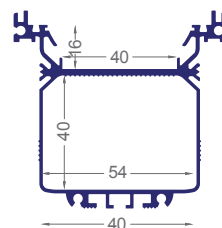
RAY SPOT



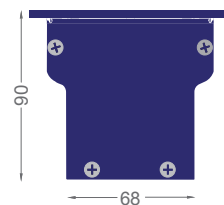
DB-67WO



DB-67WO

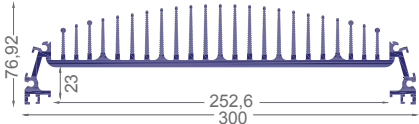
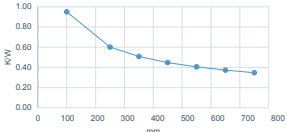
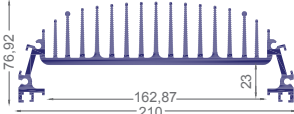
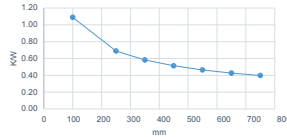
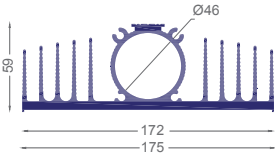
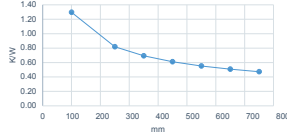
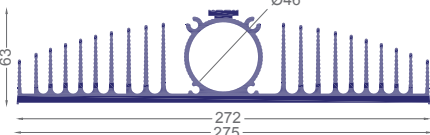
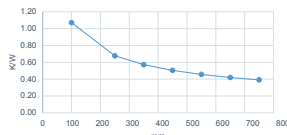
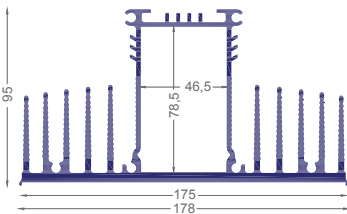
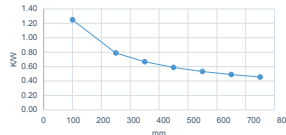
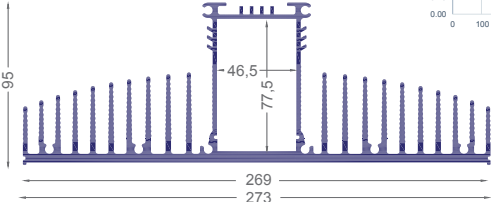
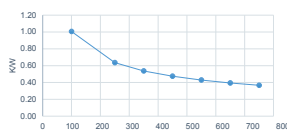


DB-67



Profile Length (mm)	304 CrNi / 4 mm A (mm)	B (mm)
100	104	210
170	174	280
255	259	365
325	329	435
480	484	590
640	644	750
960	964	1070
1200	1204	1310
1500	1504	1610

98XX SERIES MODULAR SYSTEM

9879  	 Street Lighting • SKL-79XP	 Projector Lighting • PR-79 • PR-79XP	 Canopy Lighting	 Tunnel Lighting • TNL-79 • TNL-79XP	 Ex-Proof Lighting	 LED Modules • REC-AL1-222x265x1.6-SQRx64 • REC-AL1-171x250x1.6-SQRx48 • REC-AL1-222x163x1.6-SQRx72
9880  	• SKL-80XP	• PR-80 • PR-80XP		• TNL-80 • TNL-79XP		• REC-AL1-171x250x1.6-SQRx48 • REC-AL1-150x210x1.6-SQRx48 • REC-AL1-150x210x1.6-D55V1x144
9817  		• PR-17P • PR-17G			• EXP-17	
9827  		• PR-27P • PR-27G				
9818  	• SKL-18P • SKL-18G	• PR-18P • PR-18G	• KNP-18P • KNP-18G		• EXP-18	• REC-AL1-124x202x1.6-D55V1x96 • REC-AL1-124x202x1.6-SQRx48 • REC-AL1-124x202x1.6-SQRx32 • REC-AL1-150x210x1.6-SQRx48
9828  	• SKL-28P • SKL-28G	• PR-28P • PR-28XP	• KNP-28P • KNP-28G			• REC-AL1-171x250x1.6-SQRx48 • REC-AL1-150x210x1.6-D55V1x144 • REC-AL1-150x210x1.6-SQRx48

STREET LIGHTING

PR-99



• Polycarbon Cover

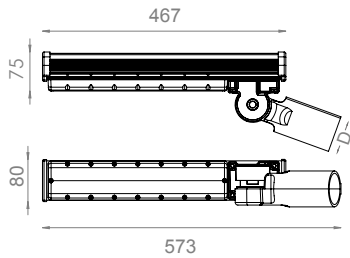


• Tempered Glass Frame

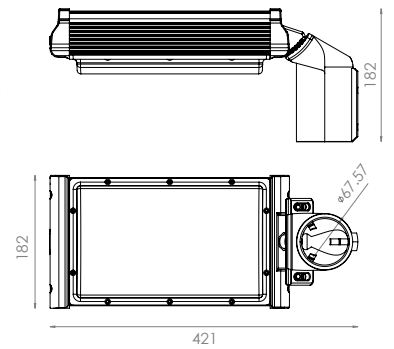


• Joint Arm Options
76, 65, 52 mm

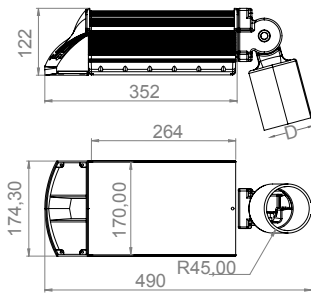
SKL-01



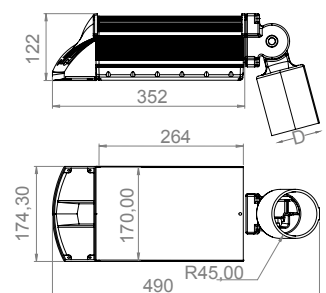
SKL-03



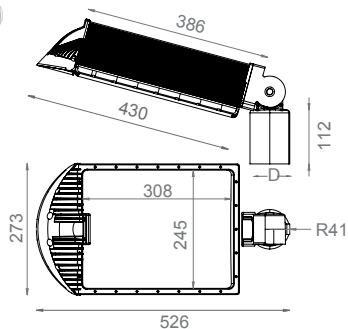
SKL-18P



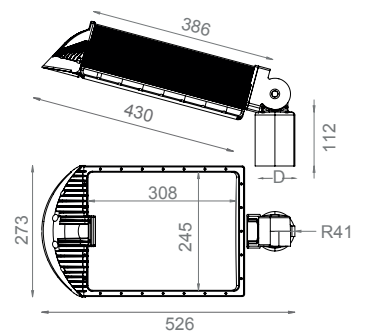
SKL-18G



SKL-28P



SKL-28G



- "D" is dimension which can be used Ø52, Ø65 and Ø76.
- Different sizes can be applied for "L1" and "L2".

STREET LIGHTING

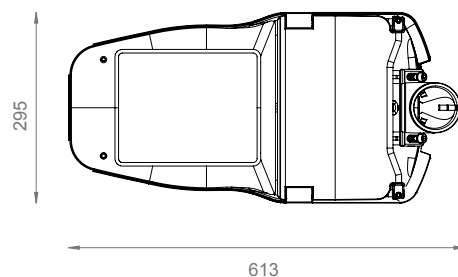
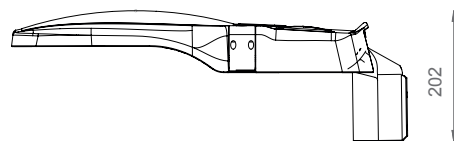
SKL-60



SKL-60K



SKL-60



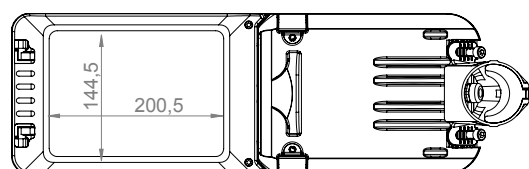
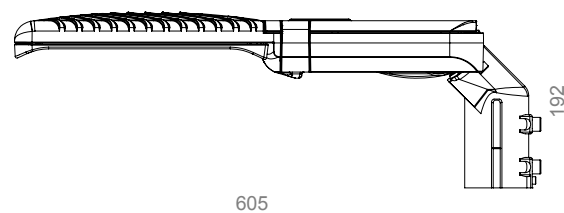
SKL-40



SKL-40K



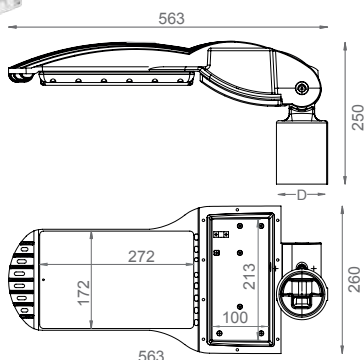
SKL-40



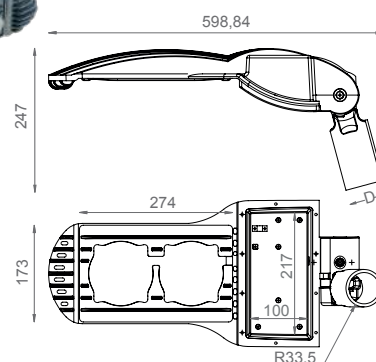
SKL-87



**SKL-87P
SKL-87G**



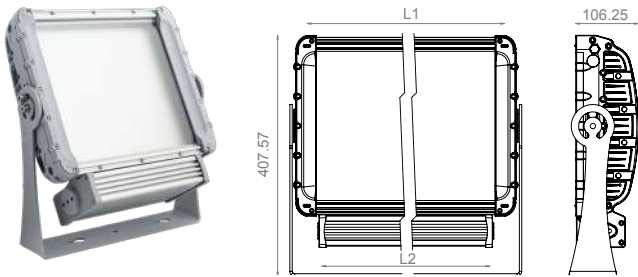
SKL-87M



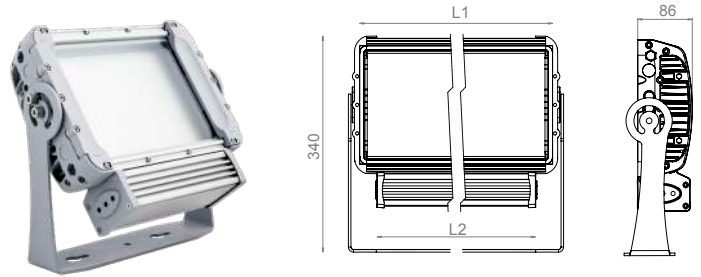
• "D" is dimension which can be used Ø52, Ø65 and Ø76.

PROJECTOR LIGHTING

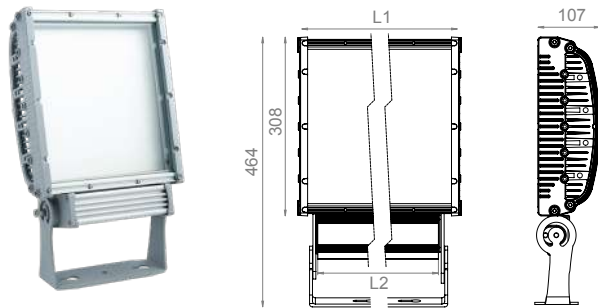
PR-79XP



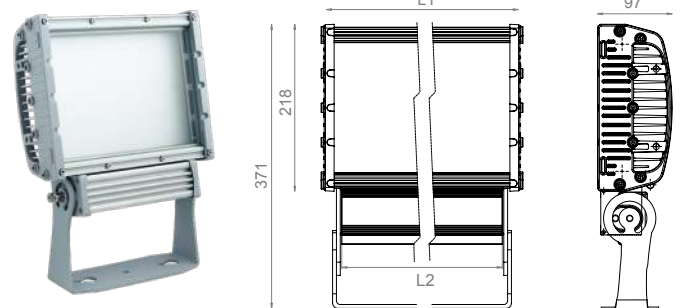
PR-80XP



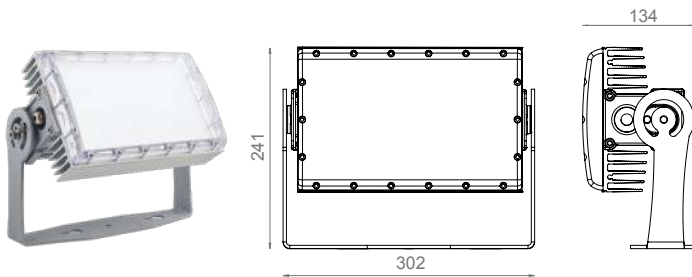
PR-79



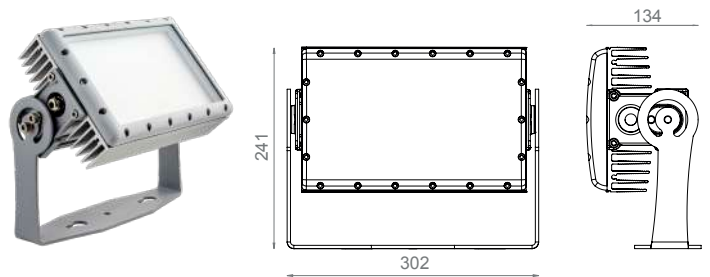
PR-80



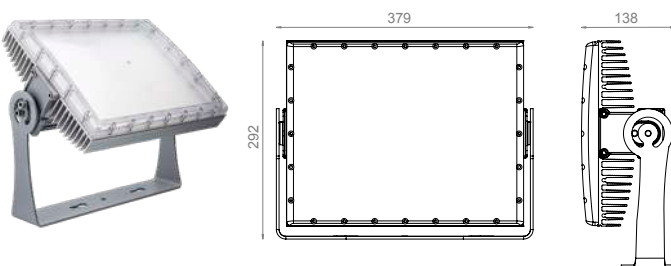
PR-18P



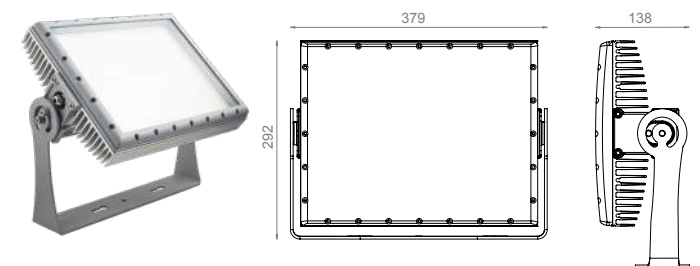
PR-18G



PR-28P



PR-28G

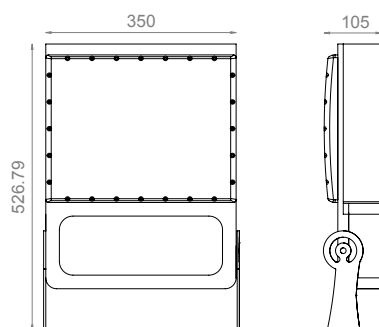


• Different sizes can be applied for "L1" and "L2".

PROJECTOR LIGHTING

PR-IKS-440*350 WITH POLYCARBONATE COVER

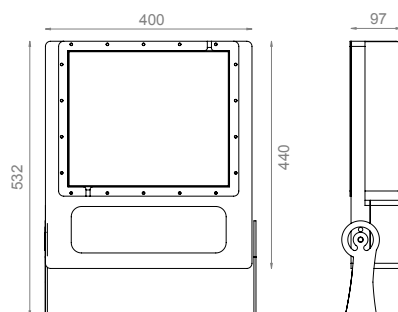
IP-67



Material	: 1xxx Series Aluminium
LED Module Area	: 320 x 245 mm
Driver Case Area	: 300 x 123 x 72 mm
Watt	: 300 W

PR-IKS-440*400 WITH TEMPERED GLASS

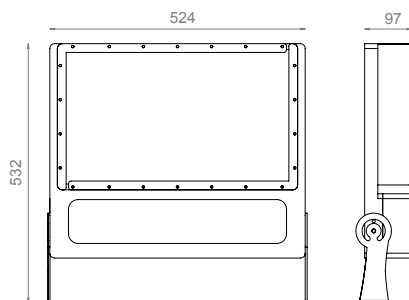
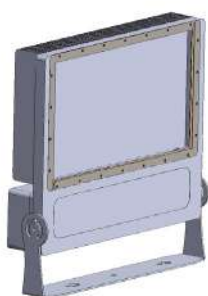
IP-67



Material	: 1xxx Series Aluminium
LED Module Area	: 308 x 259mm
Driver Case Area	: 340 x 104 x 86 mm
Watt	: 400 - 500 W

PR-IKS-440*550 WITH TEMPERED GLASS

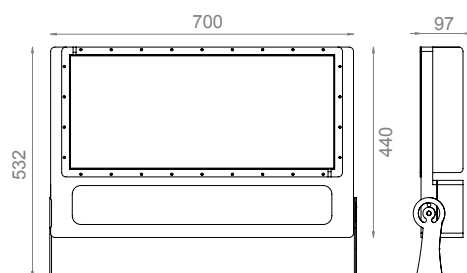
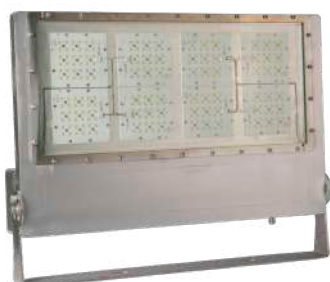
IP-67



Material	: 1xxx Series Aluminium
LED Module Area	: 455 x 249 mm
Driver Case Area	: 464 x 104 x 86 mm
Watt	: 500 - 700 W

PR-IKS-440*655 WITH TEMPERED GLASS

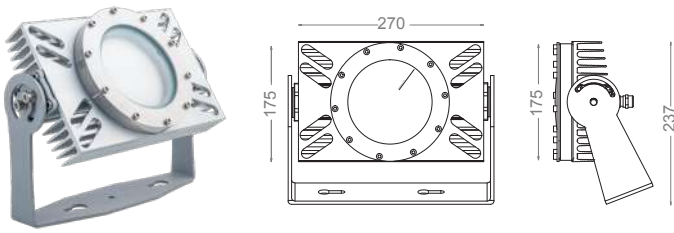
IP-67



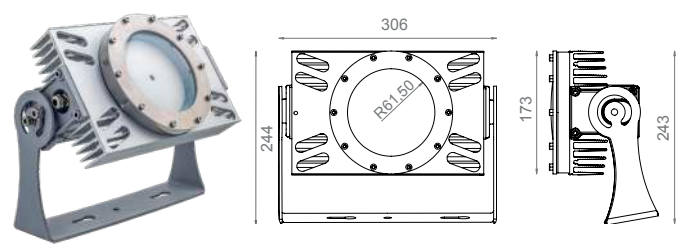
Material	: 1xxx Series Aluminium
LED Module Area	: 680 x 259 mm
Driver Case Area	: 640 x 104 x 86 mm
Watt	: 750 - 1000 W

EX-PROOF & TUNNEL & CANOPY LIGHTING

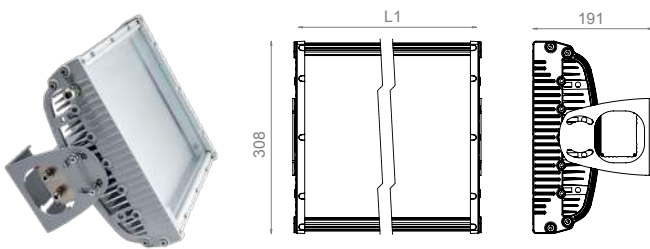
EXP-17



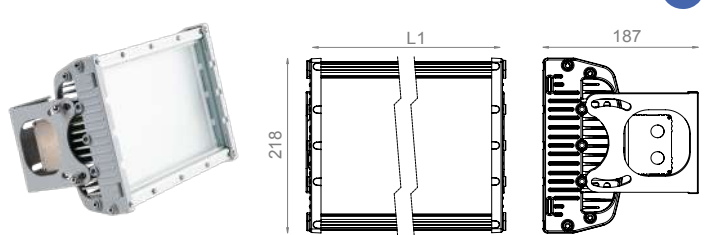
EXP-18



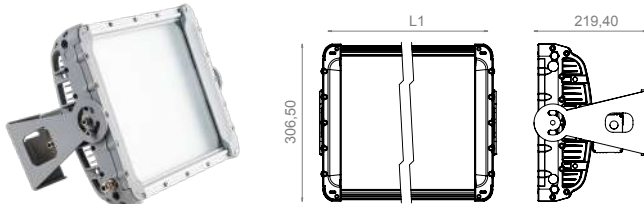
TNL-79



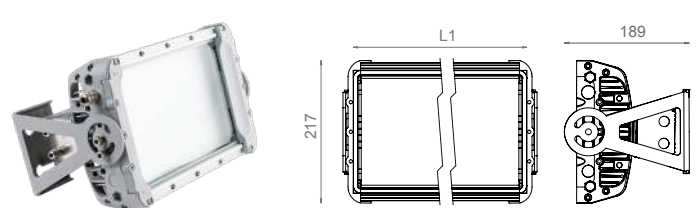
TNL-80



TNL-79XP



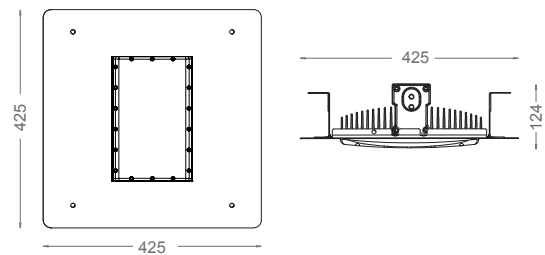
TNL-80XP



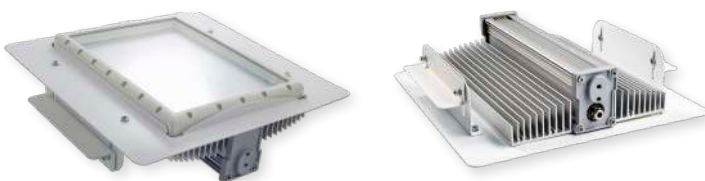
KNP-18P



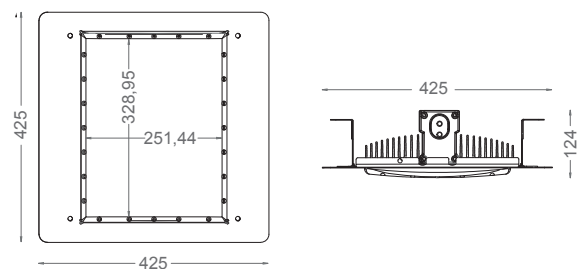
KNP-18G



KNP-28G



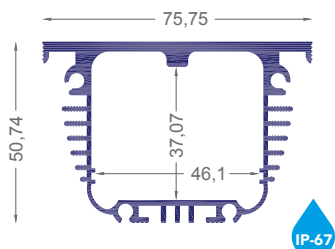
KNP-28P



• Different sizes can be applied for "L1" and "L2".

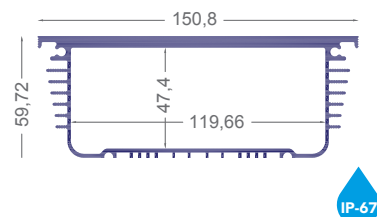
WALLWASHER LIGHTING

DB-01 & DB-01 1044



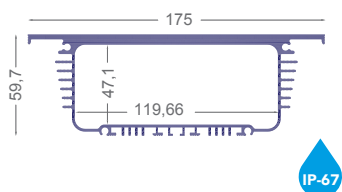
IP-67

DB-02



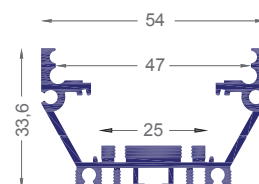
IP-67

DB-03

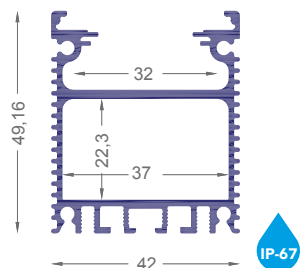


IP-67

DB-30

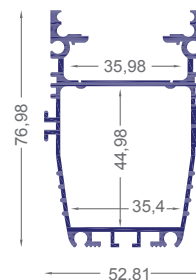


DB-49

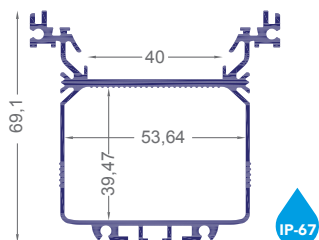


IP-67

DB-55

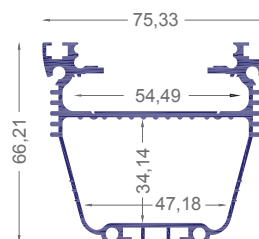


DB-67



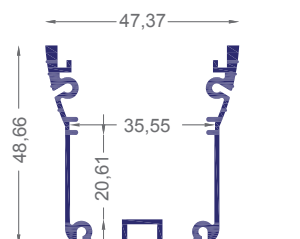
IP-67

DB-80

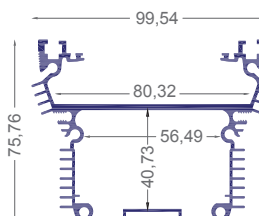


IP-65

DB-88

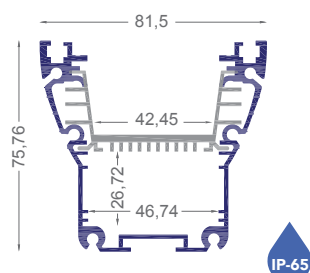


DB-92



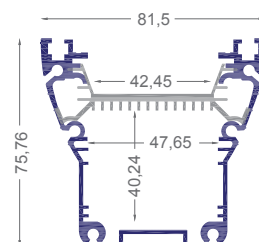
IP-65

DB-90 / LS-12

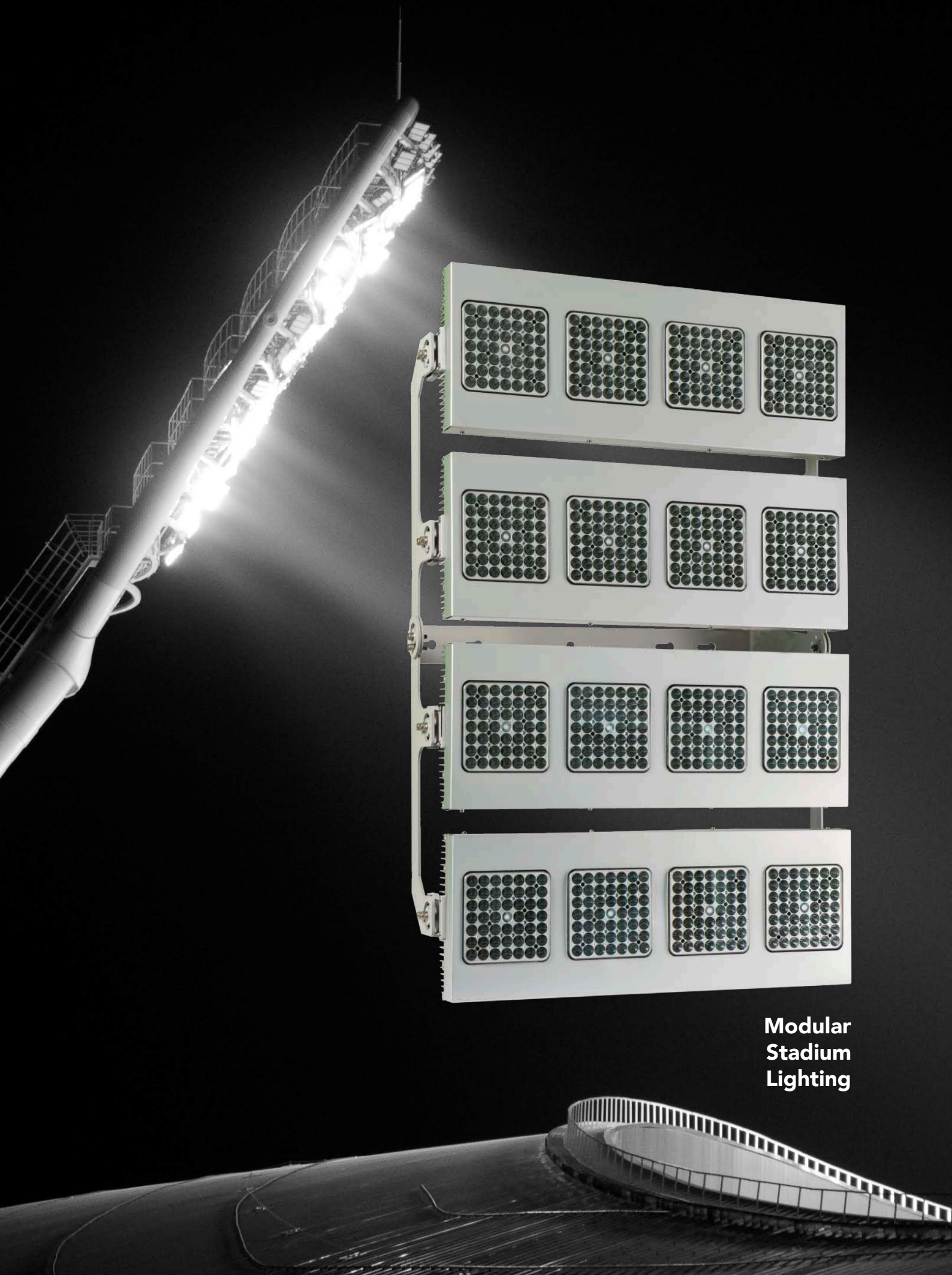


IP-65

DB-90 / LS-14



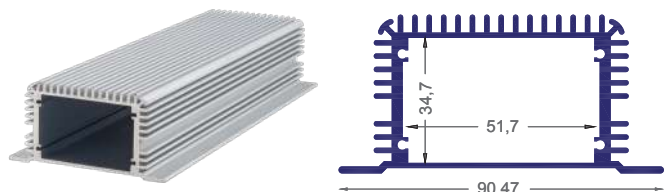
IP-65



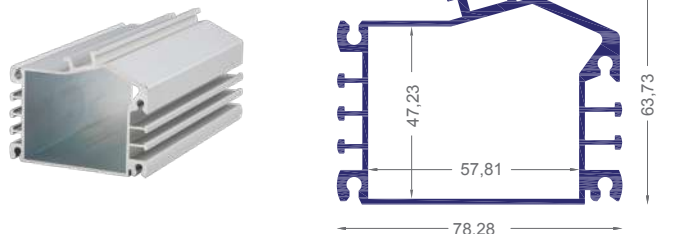
**Modular
Stadium
Lighting**

DRIVER CASES

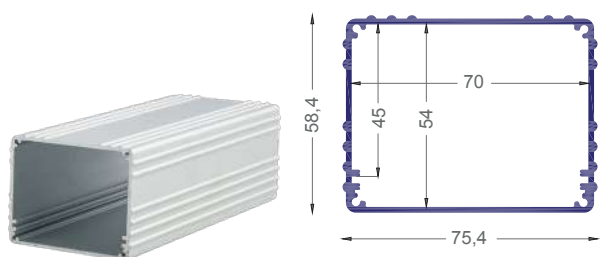
DK-44



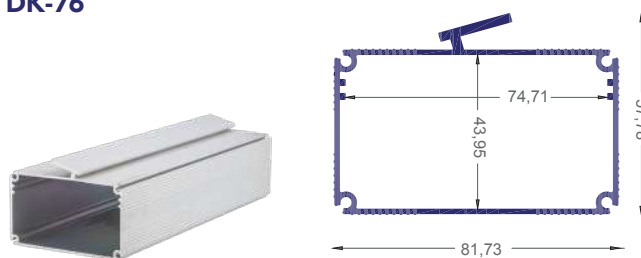
DK-57



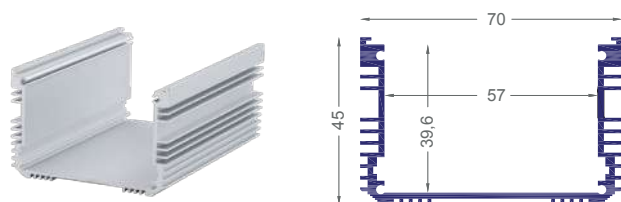
DK-70



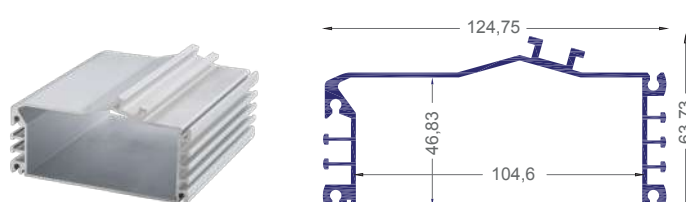
DK-76



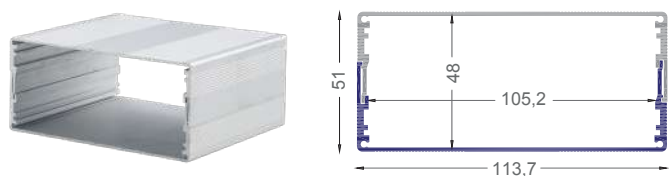
DK-89



DK-104



DK-105





Aluminium Heatsink & Housing

Indoor Lighting

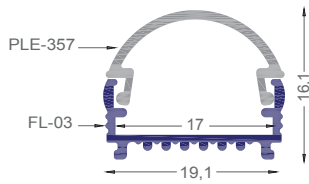
HOUSING

We reserve the right to change dimensions.

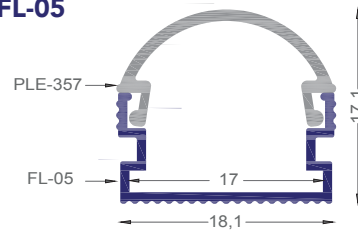


FLUORESCENT & COVE LIGHTING

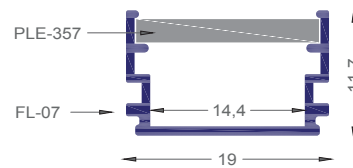
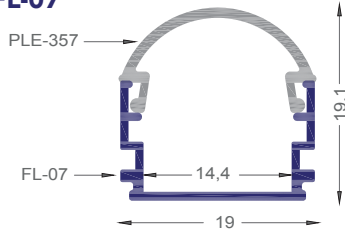
FL-03



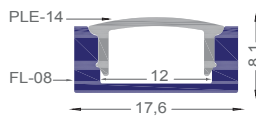
FL-05



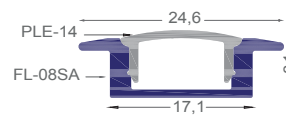
FL-07



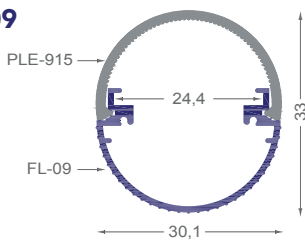
FL-08



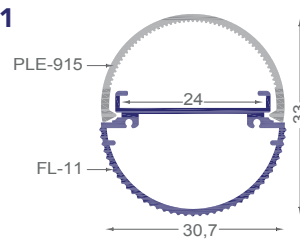
FL-08SA



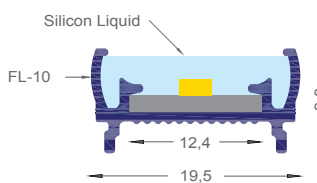
FL-09



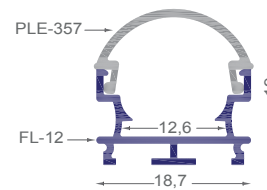
FL-11



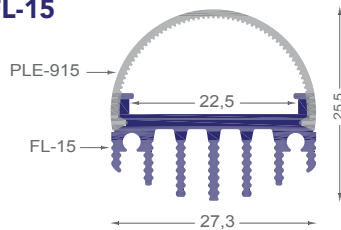
FL-10



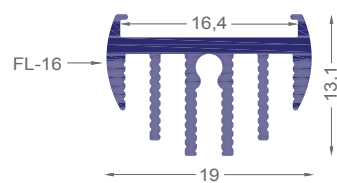
FL-12



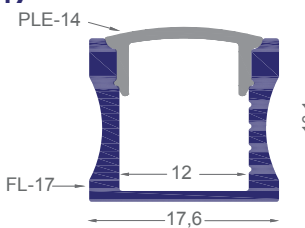
FL-15



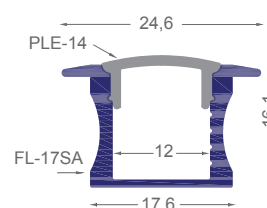
FL-16



FL-17

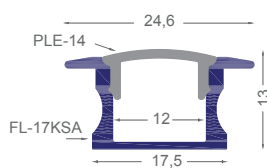


FL-17SA

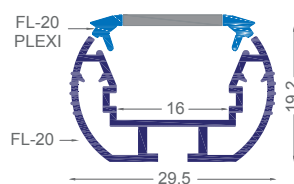


FLUORESCENT & COVE LIGHTING

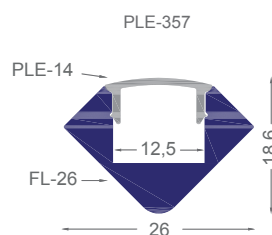
FL-17KSA



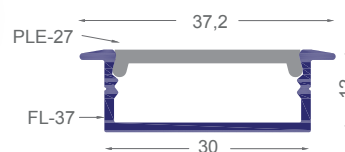
FL-20



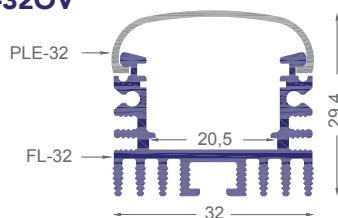
FL-26



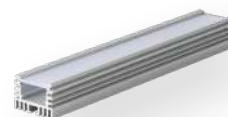
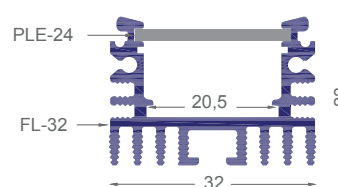
FL-37



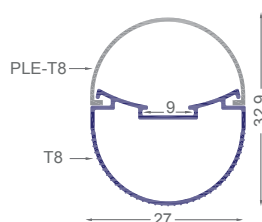
FL-32OV



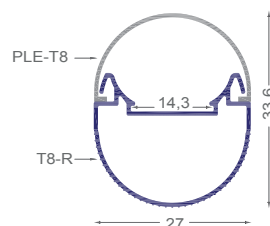
FL-32DZ



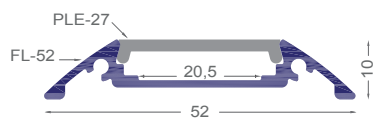
T8



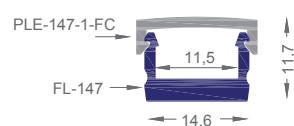
T8-R



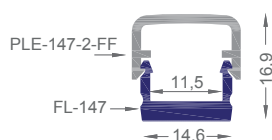
FL-52



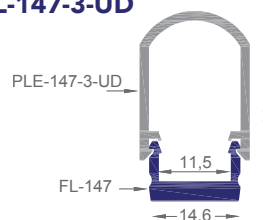
FL-147-1-FC



FL-147-2-FF



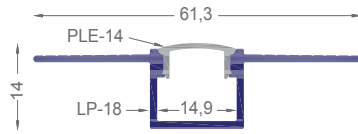
FL-147-3-UD



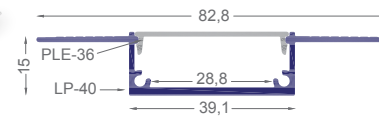
Aluminium Heatsink & Housing / Indoor Lighting

STANDARD LINEAR LIGHTING

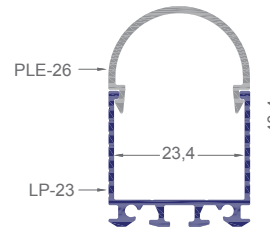
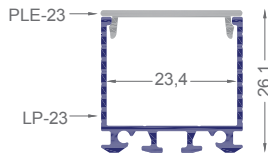
LP-18



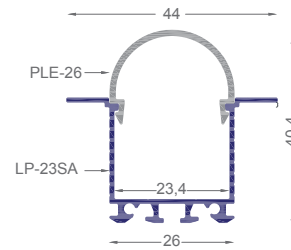
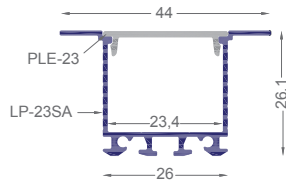
LP-40



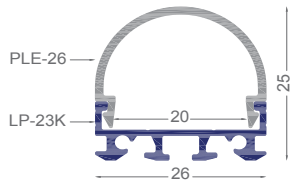
LP-23



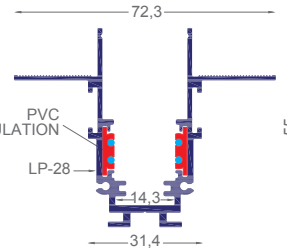
LP-23SA



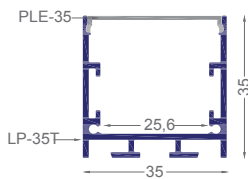
LP-23K



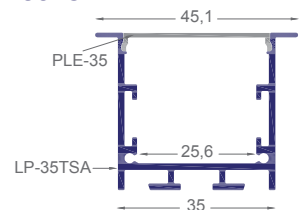
LP-28



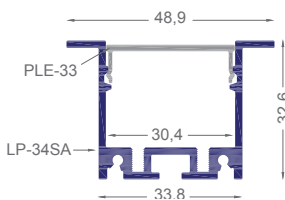
LP-35T



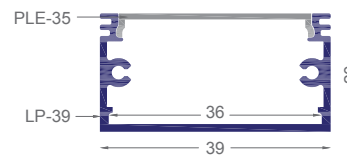
LP-35TSA



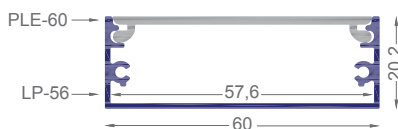
LP-34SA



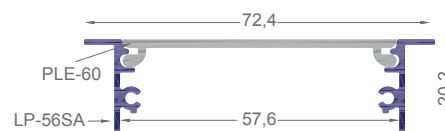
LP-39



LP-56

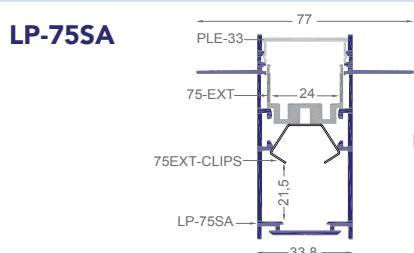
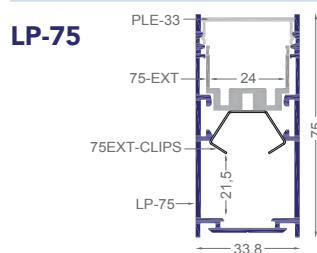
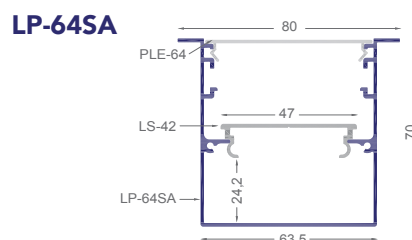
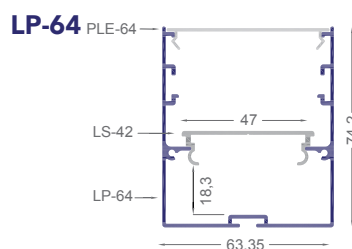
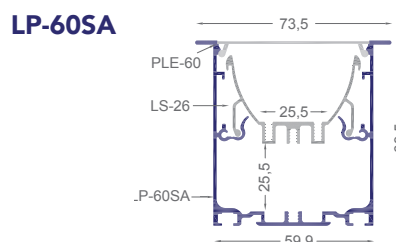
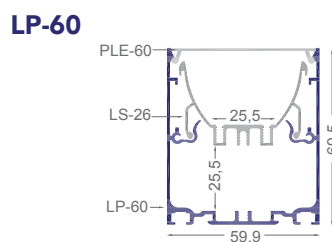
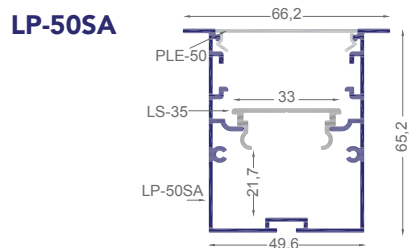
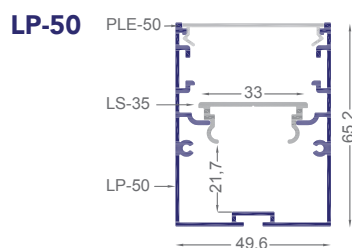
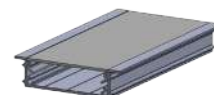
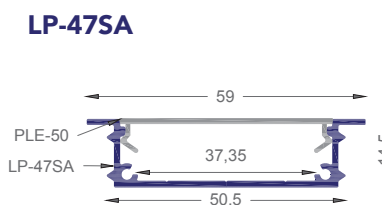
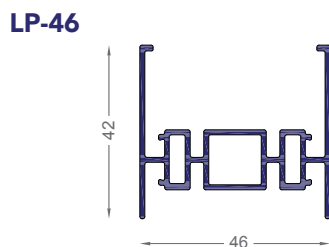
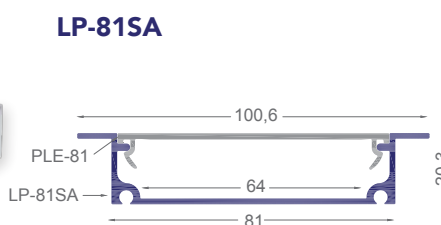
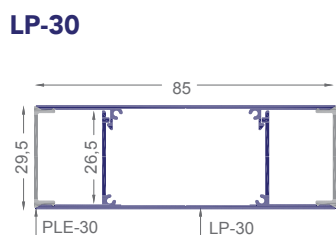
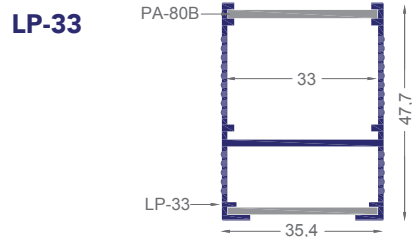
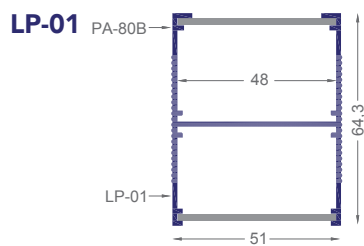


LP-56SA



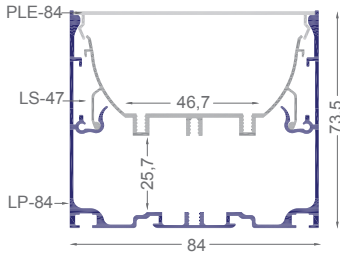
Aluminium Heatsink & Housing / Indoor Lighting

STANDARD LINEAR LIGHTING

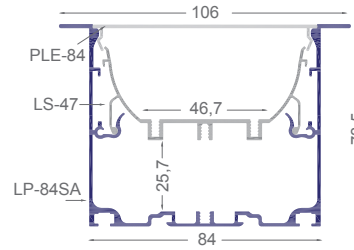


STANDARD LINEAR LIGHTING

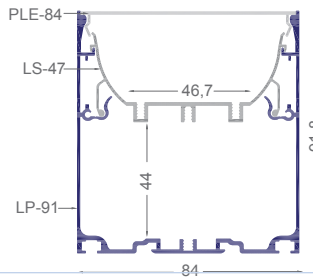
LP-84



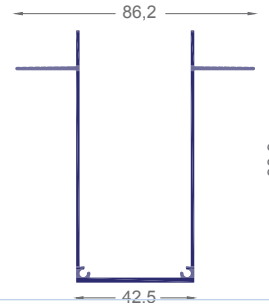
LP-84SA



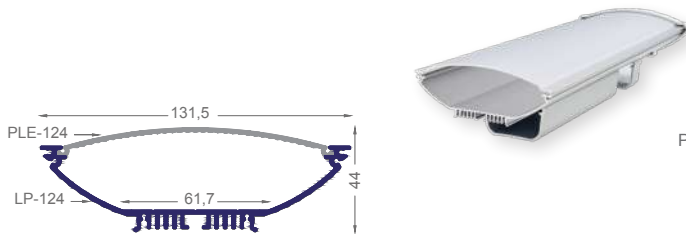
LP-91



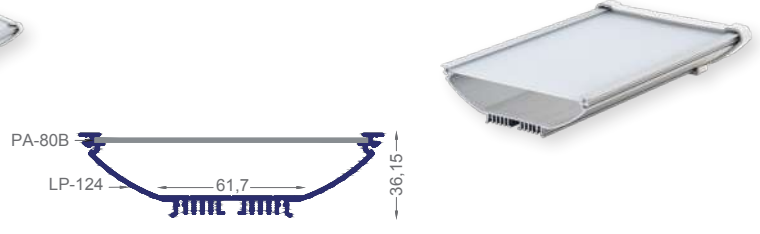
LP-43



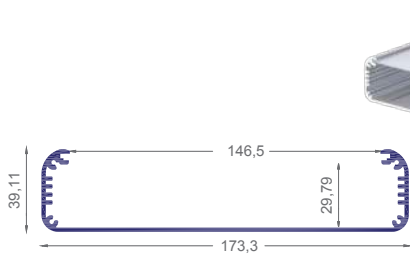
LP-124 OV



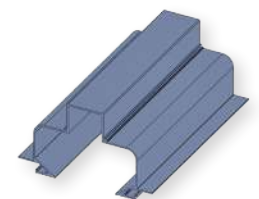
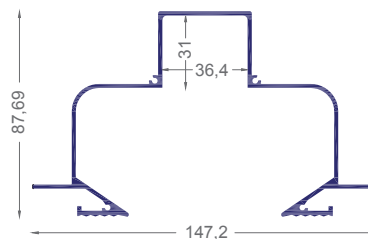
LP-124 DZ



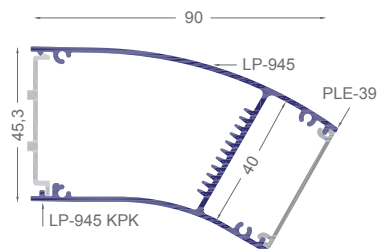
LP-27



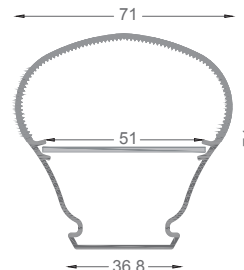
LP-147



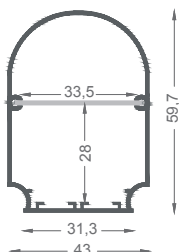
LP-945



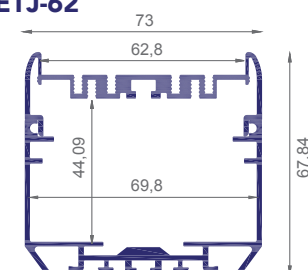
ETJ-PC78



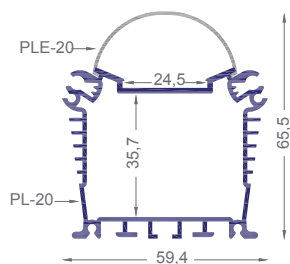
ETJ-60



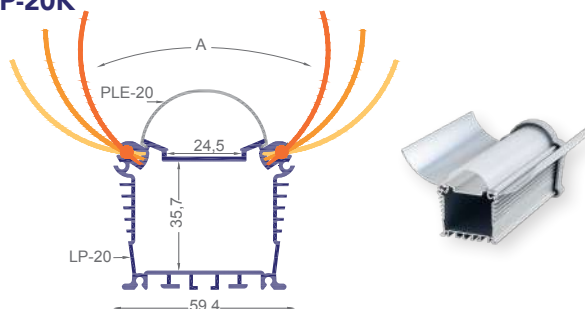
ETJ-62



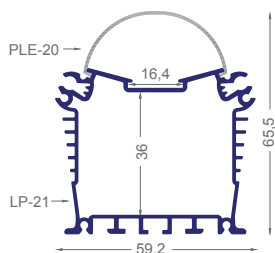
LP-20



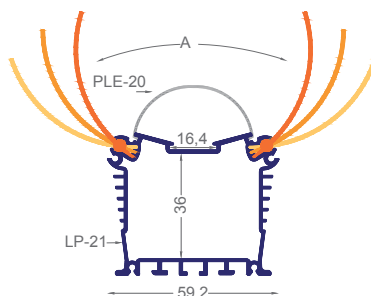
LP-20K



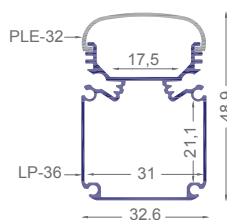
LP-21



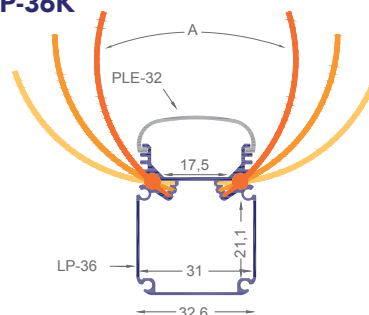
LP-21K



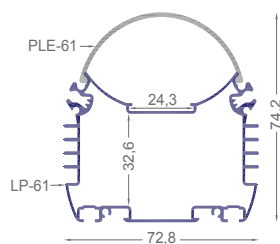
LP-36



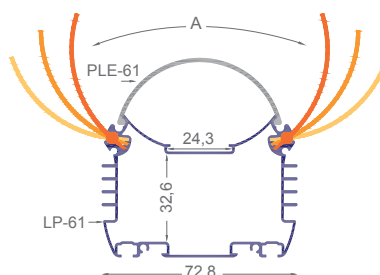
LP-36K



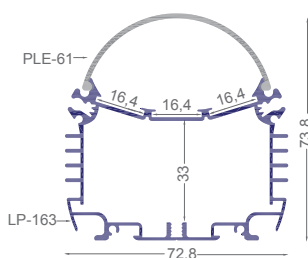
LP-61



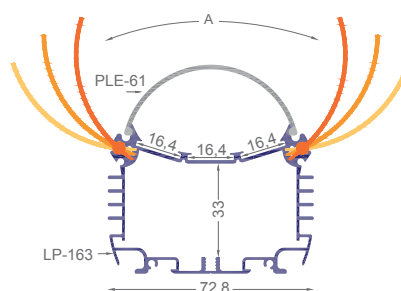
LP-61K



LP-163



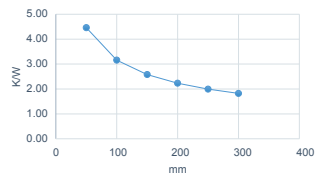
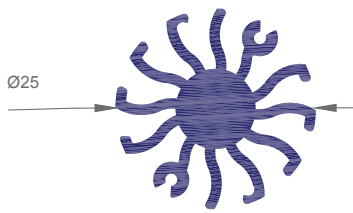
LP-163K



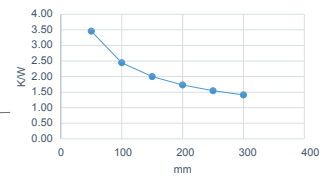
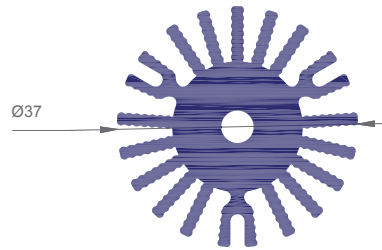
• "A" is dimension which can be used 80°, 100° and 130°

CIRCULAR HEATSINK

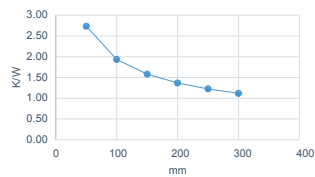
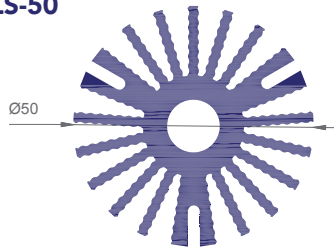
LS-25



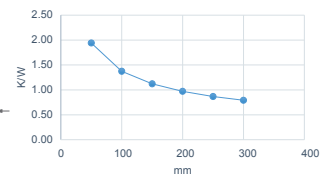
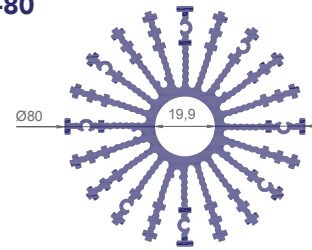
LS-37



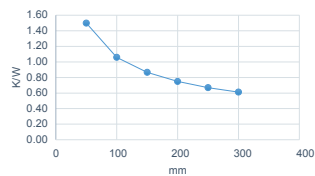
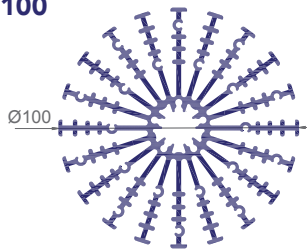
LS-50



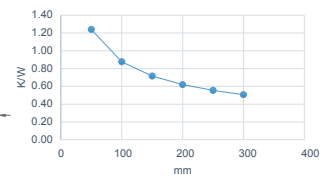
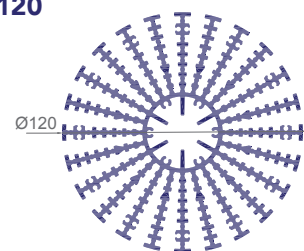
LS-80



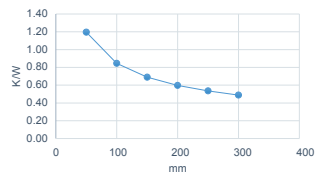
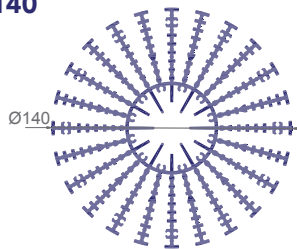
LS-100



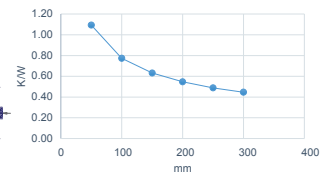
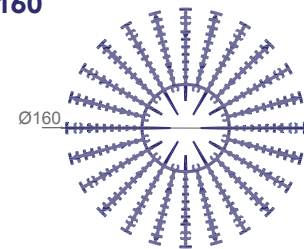
LS-120



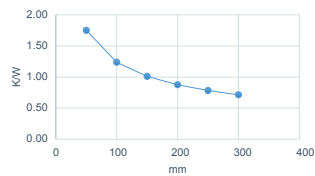
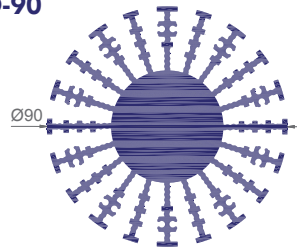
LS-140



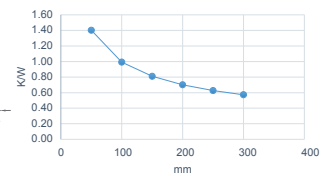
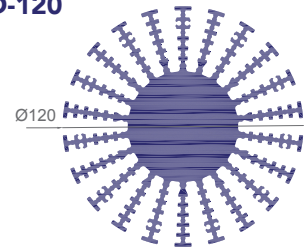
LS-160



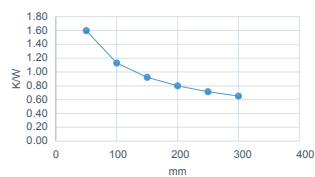
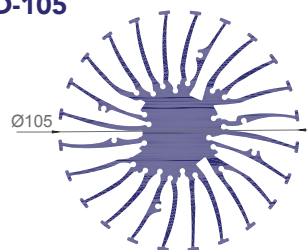
LSD-90



LSD-120

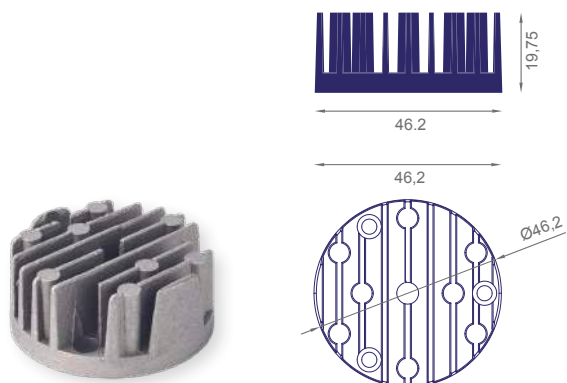


LSD-105

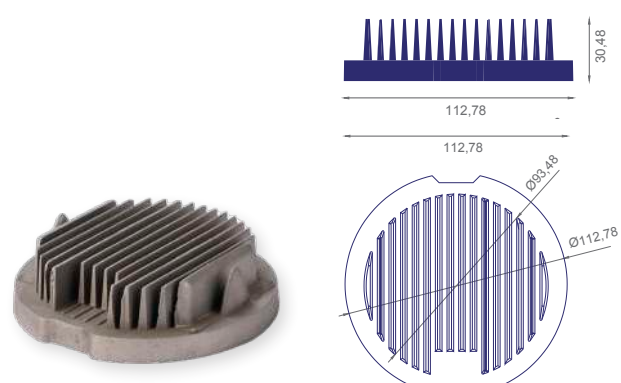


DIAGONAL HEATSINK

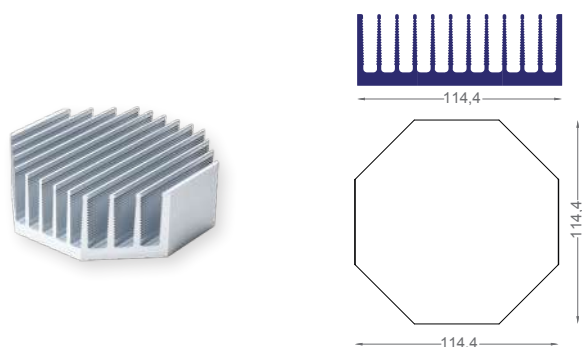
LS-45



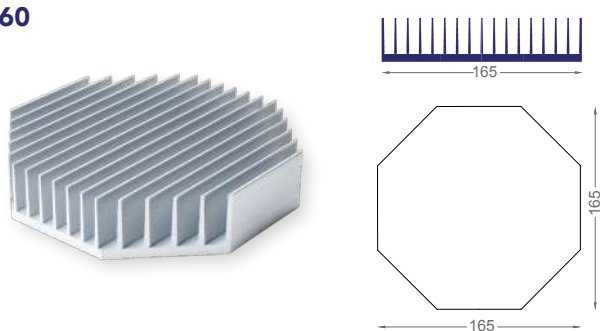
LS-110



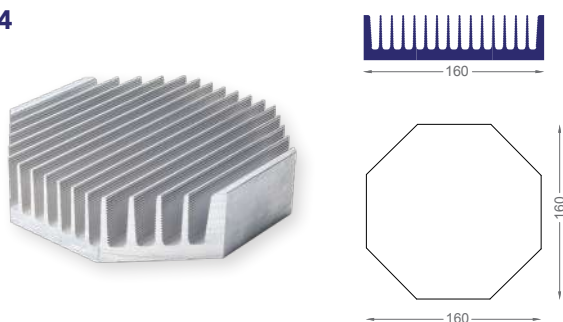
LSK-114



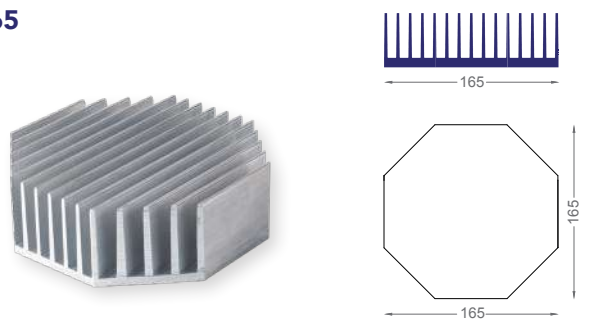
LSK-160



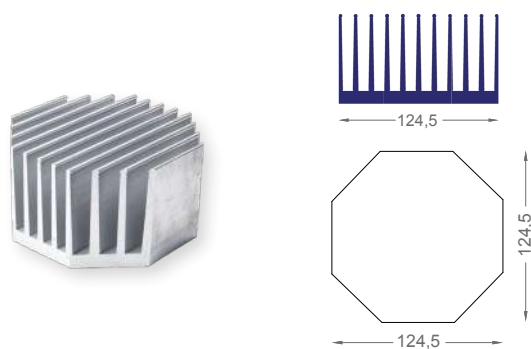
LSK-164



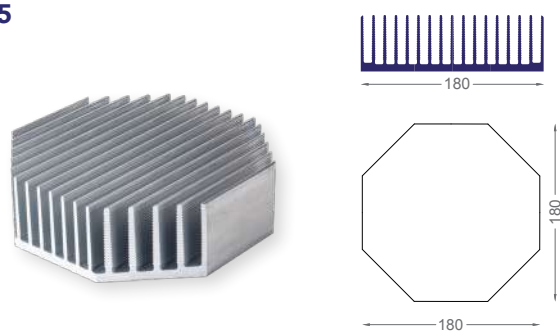
LSK-165



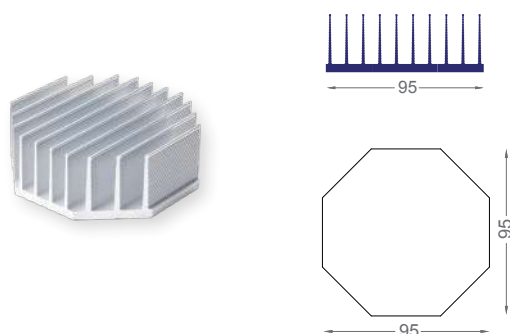
LSK-167



LSK-185



LSK-95



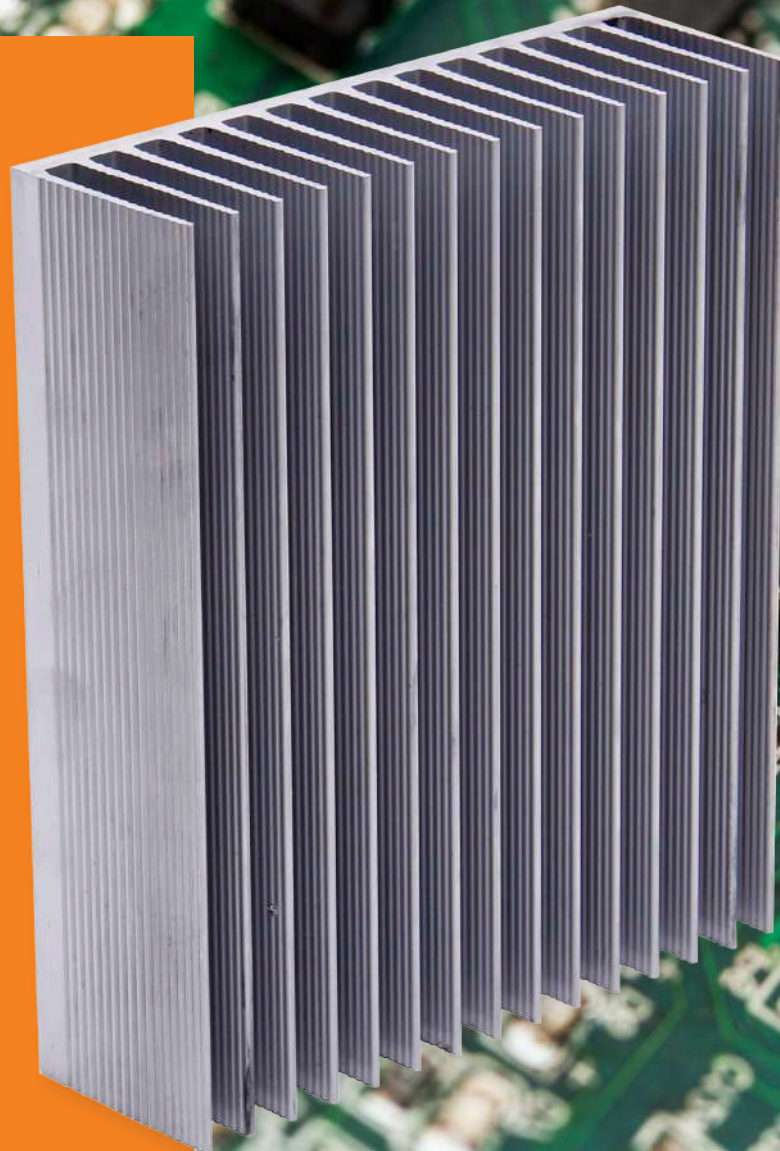
Blank lined paper for writing.



Aluminium Heatsink & Housing

Component HEATSINKS

We reserve the right to change dimensions.

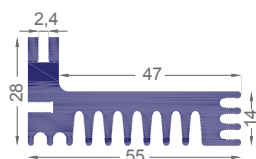


COMPONENT HEATSINK

TR-5 12,5 17,5 16 23 9	TR-10 17,8 24 30 10 28,5	TR-25 28,6 21,5 21,3 26,2 11,8		
57AS 12 15,3	50AS 20 17 5,2 12	59AS 23,8 16,75 21,2	45AS 29 11,5 12 25,4	52AS 11 13 27
21AS 11,85 21 2	29KS 25 29,78 4	151AS 25,7 30 5	49KS 30 39,45 8,75	106AS 44,5 53,8 7,45
1353AS 49,85 42 7,1	1551AS 49 33,8 7,4	102AS 23 51 4	154AS 21 52 3,5	163AS 40 64 9,7
732AS 24 51 3 57	733AS 24 53 2 57	730AS 3 24 28	20X2 LAMA 20 2	31AS 12,5 31,2 3
255AS 35 17,35 12,7	155AS 42 25,4 17	55AS 18,8 19 48,2	25AS 12 25,65 2,5	175AS 2,4 20 28 14

COMPONENT HEATSINK

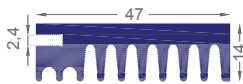
176AS



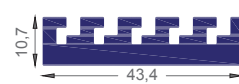
276AS



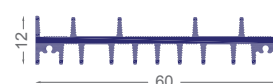
275AS



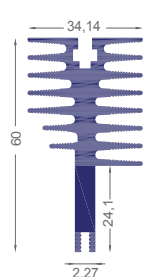
43KS



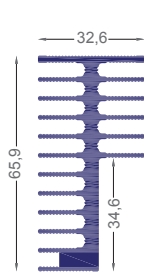
60AS



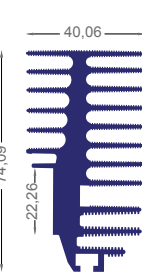
8009AS



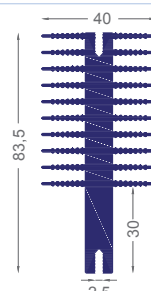
81AS



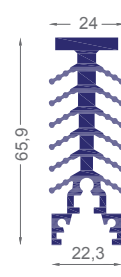
1183AS



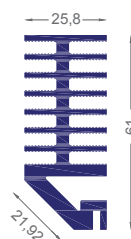
1281AS



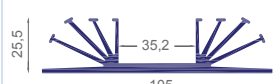
65AS



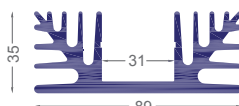
70AS



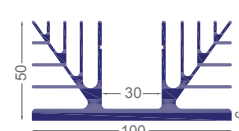
129AS



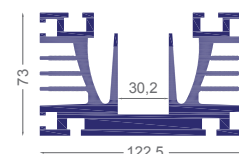
75AS



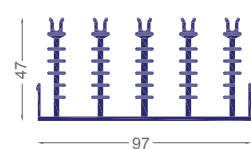
76AS



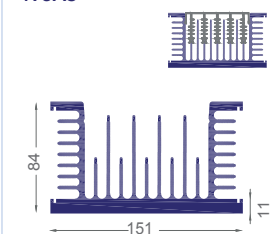
27AS



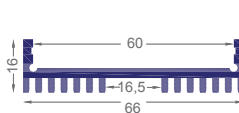
192AS



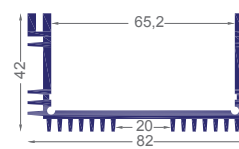
193AS



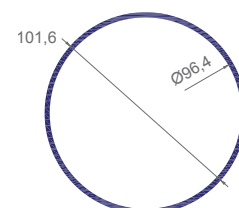
734AS



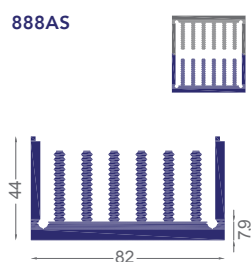
735AS



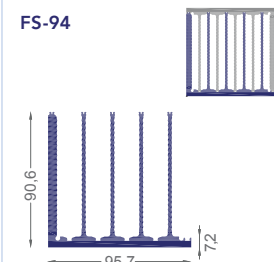
101.6 PIPE



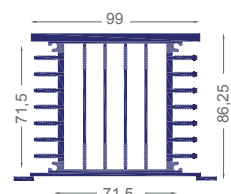
888AS



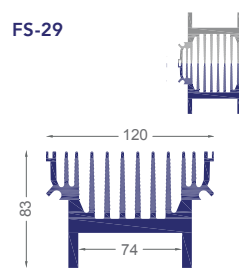
FS-94



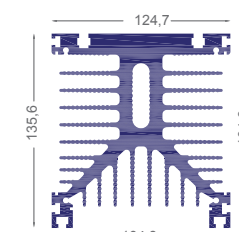
FS-18



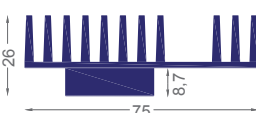
FS-29



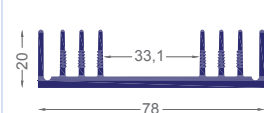
99AS



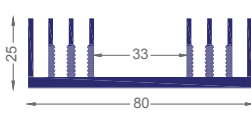
26AS



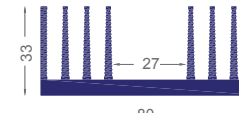
110AS



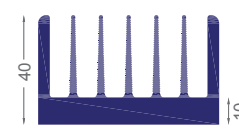
12AS



135AS

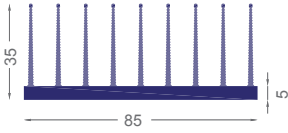
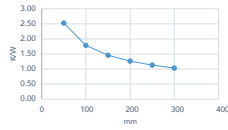


66AS

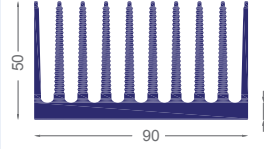
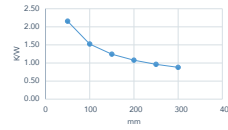


COMPONENT HEATSINK

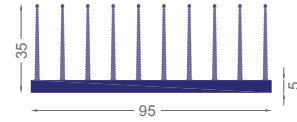
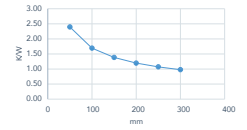
85AS



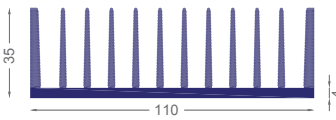
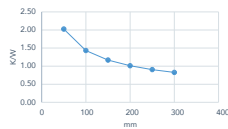
353AS



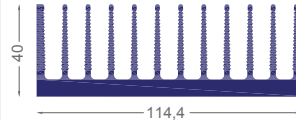
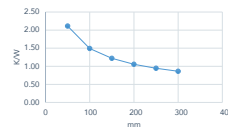
95AS



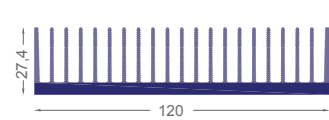
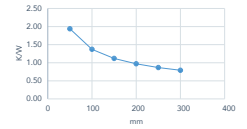
113AS



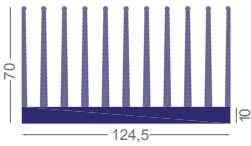
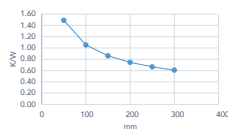
114AS



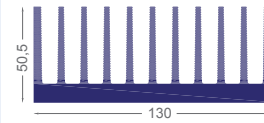
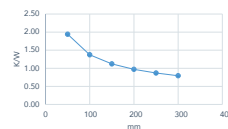
120AS



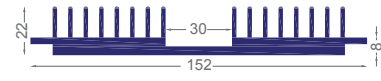
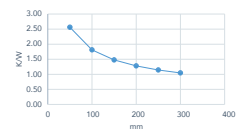
167AS



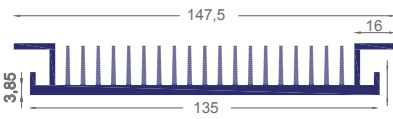
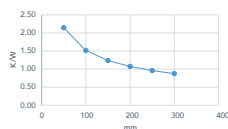
130AS



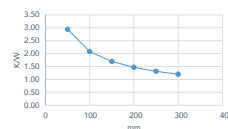
152AS



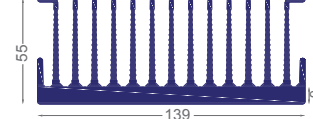
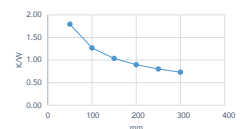
8008AS



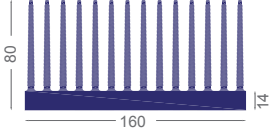
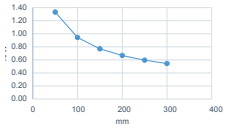
171AS



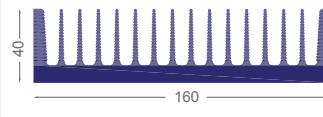
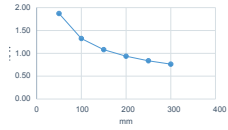
166AS



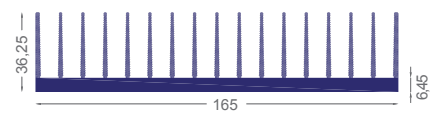
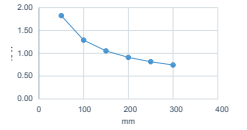
265AS



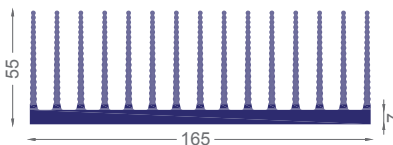
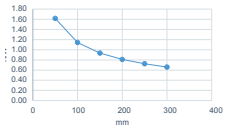
164AS



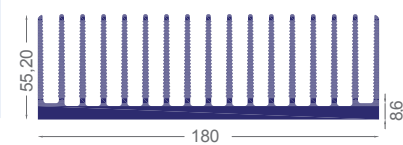
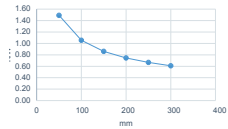
160AS



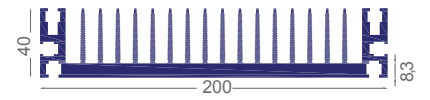
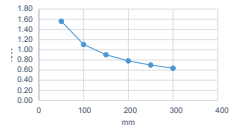
165AS



185AS

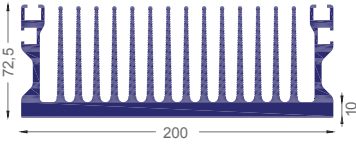
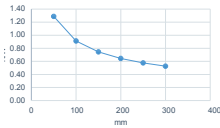


264AS

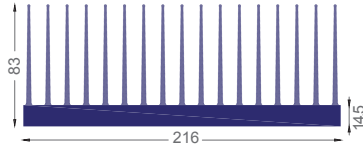
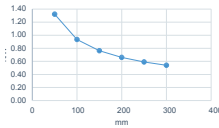


COMPONENT HEATSINK

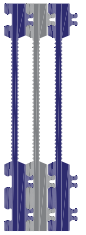
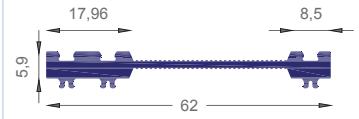
364AS



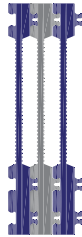
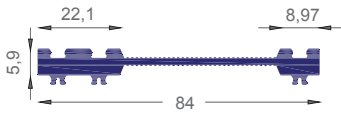
365AS



62BS



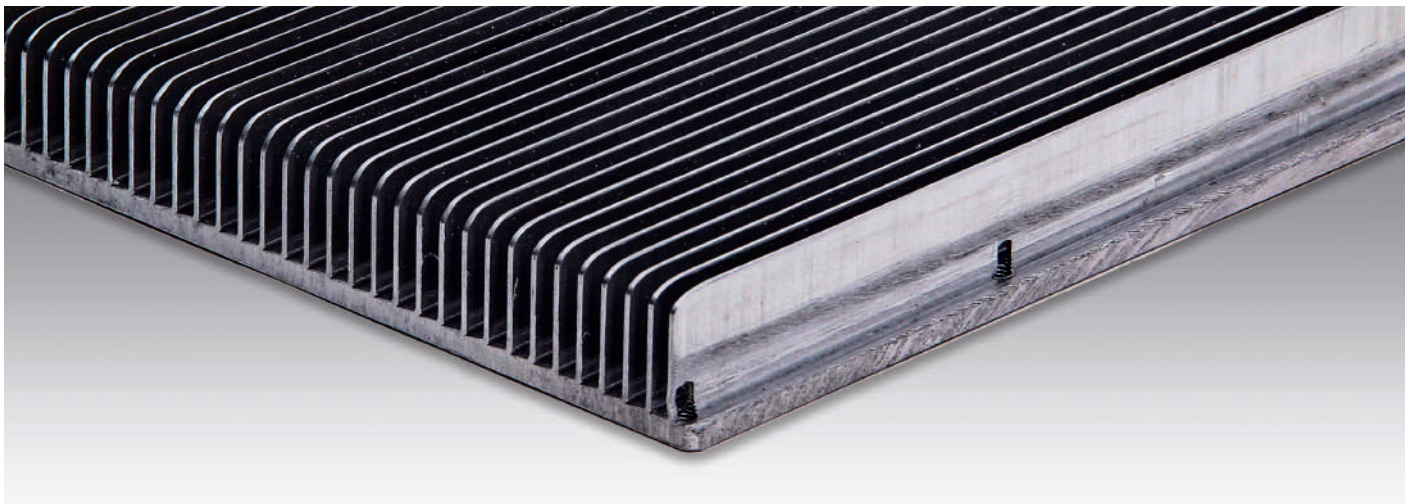
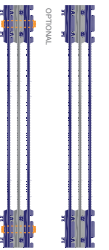
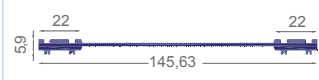
84BS



121BS



806BS



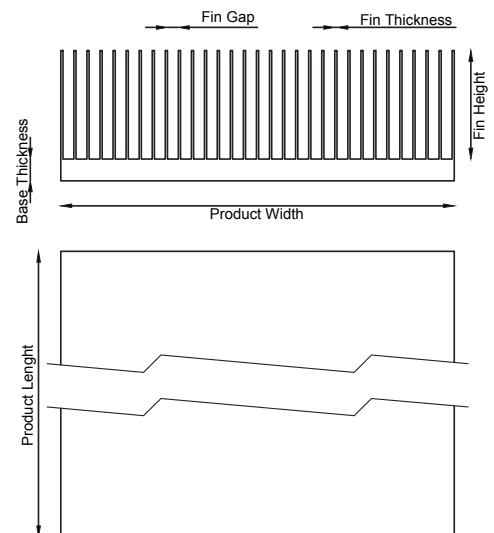
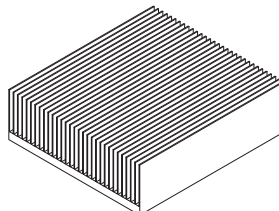
SKIVING HEATSINK

Skiving is a type of manufacturing process which allows the fins and the base to be produced as a single piece from a block of material without the need of any interface. This ensures that heat is optimally distributed and transferred from the base to the fin.

Design Parameters

Max. applicable dimensions are 295x660 mm and due to the fin lengths max. 295 mm can be fitted. Fin density can be set in any desired spacing but not less than 2 mm. Independent from the fin density/quantity and spacing, the fin height can be maximum 60mm.

Fin Thickness	: 0,8 mm - 1 mm
Fin Gap	: >2 mm & <8 mm
Fin Height	: <60 mm
Base Thickness	: <25 mm
Product Weight	: <660 mm
Product Length	: <300 mm





Osram Led Chip
Mid Power
High Power
Colour
Horticulture

LED CHIP

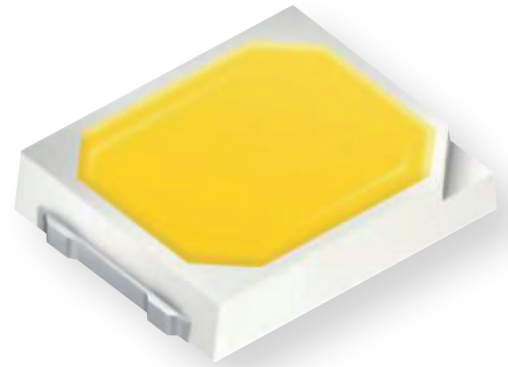
We reserve the right to change dimensions.



Led Lens / Led Lightning Component

MID POWER LED CHIPS

DURIS-E2835



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW JTLMSX.EM	White SMT package, colored diffused silicone resin	60 mA	90 mA	24.8 lm @5700K	3.15 V	133 lm/W @5700K	2200K - 6500K	min. 80 (typ.82)
GW JTLMS1.EM		60 mA	150 mA	29.2 lm @4000K	2.95 V	165 lm/W @4000K	2200K - 6500K	min. 80 (typ.85) R9: 0 (min.)
GW JTLPS1.EM		150 mA	250 mA	74.3 lm @4000K	3.05 V	164 lm/W @4000K @65mA: typ. 185 lm/W @4000K	2200K - 6500K	min. 80 (typ.82) R9: 0 (min.)
GW JTLRS1.EM		100 mA	120 mA	126 lm @2700K	9.20 V	137 lm/W @2700 K	2200K - 6500K	min. 80 (typ.82) R9: 0 (min.)

OSCONIQ E 2835



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW QTLTS1.EM	White SMT package, colored diffused silicone resin	65 mA	250 mA	37.2 lm @4000 K	2.70 V	212 lm/W @4000 K	2200K - 6500K	min. 80 (typ.82) R9: 0 (min.)
GW QTLTS2.QM		65 mA	200 mA	34 lm @4000 K	2.71 V	195 lm/W @4000 K	2200K - 6500K	min. 90 (typ.92) R9: 50 (min.)

DURIS S 5



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW PSLT33.EM (G3)	White SMT package, colored diffused silicone resin	150 mA	200 mA	138 lm @3000K	6.13 V	150 lm/W @3000K	2700K - 6500K	min.80(typ. 82)R9: 0 (min.)
GW PSLT33.PM (G3)		150 mA	200 mA	157 lm @4000K	6.13 V	171 lm/W @4000K	3000K - 6500K	min.70(typ. 72)R9: -50 (min.)

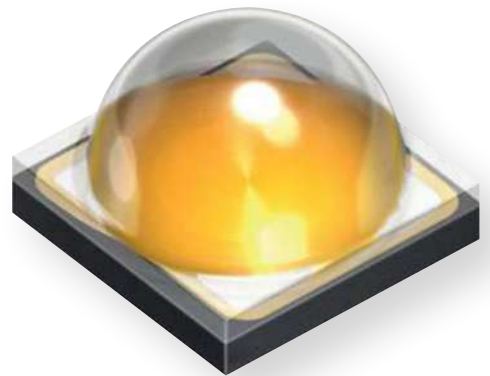
HIGH POWER LED CHIPS

OSCONIQ S 3030



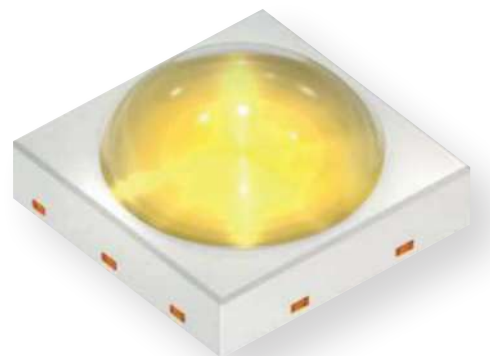
Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW QSLMS2.EM	White SMT package	65 mA	200 mA	38.6 lm @4000 K	2.70 V	220 lm/W @4000K	2200K - 6500K	min. 80

OSLON SQUARE 3030



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW CSSRM3.PM	SMT ceramic package with silicone lens	700 mA	1800 mA	357 lm @4000K, 85 °C	2.80 V	182 lm/W @4000K, 85 °C	2200K - 6500K	min. 70 (typ.72) R9: -40 (min.)
GW CSSRM3.EM		700 mA	1800 mA	301 lm @3000K, 85 °C	2.80 V	153 lm/W @3000K, 85 °C	2700K - 5700K	min. 80 (typ.82) R9: 0 (min.)

OSCONIQ P 3030



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW QSSPA1.EM	New SMD epoxy package with silicone lens	350 mA	1300 mA	133 lm @3000K, 85 °C	2.85 V	133 lm/W @3000K, 85 °C	2200K - 5000K	min. 80 (typ.83) R9: 0 (min.)
GW QSSPA1.PM		350 mA	1300 mA	160 lm @5000K, 85 °C	2.85 V	160.4 lm/W @5000K, 85 °C	2700K - 6500K	min. 70 (typ.72) R9: -50 (min.)

HIGH POWER LED CHIPS

DURIS S 8 5050



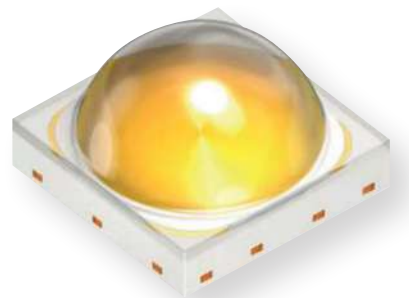
Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW P9LR35.EM	White SMT package, colored diffused silicone resin	180 mA	800 mA	184 lm @3000K	5.55 V	184 lm/W @3000K	2200K - 6500K	min. 80 (typ.82) R9: -7 (min.)
GW P9LR35.PM		180 mA	800 mA	216 lm @4000K	5.50 V	216 lm/W @4000K	2200K - 6500K	min. 70 (typ.72) R9: -50 (min.)
GW P9LR35.EM Gen5		180 mA	1050 mA	197 lm @4000K	5.55 V	197 lm/W @4000K	3000K - 5700K	min. 80 (typ.82) R9: -7 (min.)
GW P9LR35.PM Gen5		180 mA	1050 mA	215 lm @4000K	5.55 V	215 lm/W @4000K	2700K - 6500K	min. 70 (typ.72) R9: -50 (min.)

DURIS S 5050



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW Q9LR32.EM	White SMT package, colored diffused silicone resin	180 mA	1050 mA	200 lm @4000K	5.52 V	201 lm/W @4000K	2200K - 6500K	min. 80 (typ.82) R9: -7 (min.)
GW Q9LR32.PM		180 mA	1050 mA	217 lm @4000K	5.52 V	218 lm/W @4000K	2200K - 6500K	min. 70 (typ.72) R9: -50 (min.)
GW Q9LR33.PM		180 mA	1050 mA	223 lm @4000K	5.52 V	224 lm/W @4000K	2200K - 6500K	min. 70 (typ.72) R9: -50 (min.)

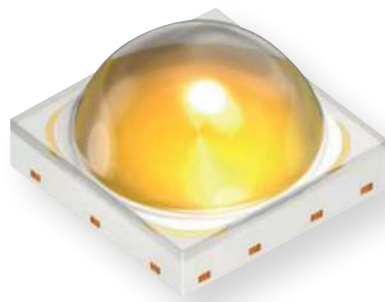
OSCONIQ P 3737 (2W)



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW PUSRA1.EM	New SMD epoxy package	700 mA	1500 mA	285 lm @3000K, 85 °C	2.84 V	143 lm/W @3000K, 85 °C	2700K - 5700K	min. 80 (typ.83) R9: 0 (min.)
GW PUSRA1.PM	with silicone lens	700 mA	1500 mA	346 lm @5000K, 85 °C	2.84 V	174 lm/W @5000K, 85 °C	3000K - 8000K	min. 70 (typ.72) R9: -50 (min.)

HIGH POWER LED CHIPS

OSCONIQ P 3737 (3W)



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW PUSTA1.CM	White SMT package with clear silicone lens	1050 mA	3000 mA	397 lm @5700K, 85 °C	2.75 V	137 lm/W @5700K, 85 °C	5000K - 5700K	min. 90 (typ.93) R9: 50 (min.)
GW PUSTA1.EM	New SMD epoxy package with silicone lens	1050 mA	3000 mA	424 lm @3000K, 85 °C	2.75 V	146 lm/W @3000K, 85 °C	2700K - 5700K	min. 80 (typ.83) R9: 0 (min.)
GW PUSTA1.PM	New SMD epoxy package with silicone lens	1050 mA	3000 mA	500 lm @5000K, 85 °C	2.75 V	173 lm/W @5000K, 85 °C	2200K - 6500K	min. 70 (typ.72) R9: -50 (min.)

OSLON SSL 80



Product Code	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current	CCT Range	CRI
GW CS8PM1.CM	White SMT package with clear silicone lens	350 mA	1300 mA	104 lm @3000K, 85 °C	2.85 V	104 lm/W @3000K, 85 °C	2700K - 4000K	min. 90 (typ.92) R9: 50 (min.)
GW CS8PM1.EM		350 mA	1300 mA	120 lm @3000K, 85 °C	2.85 V	123 lm/W @3000K, 85 °C	2500K - 5000K	min. 80 (typ.82) R9: 0 (min.)
GW CS8PM1.PM		350 mA	1300 mA	144 lm @5000K, 85 °C	2.85 V	144 lm/W @5000K, 85 °C	3000K - 6500K	min. 70 (typ.72) R9: -40 (min.)

COLOUR LED CHIPS

DURIS E 2835



Product Code	Colour	Dominant Wavelength	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current
GB JTLPS1.13	Blue	465 nm	White SMT package, colored diffused silicone resin	150 mA	200 mA	11 lm	3.2 V	23 lm/W
GR JTLPS1.23	Red	620 nm		150 mA	200 mA	24.1 lm	2.2 V	74.4 lm/W
GT JTLPS1.13	True Green	525 nm		150 mA	200 mA	67.7 lm	3.0 V	153 lm/W

HORTICULTURE LED CHIP

DURIS S 5



Product Code	Colour	Dominant Wavelength	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current
GA PSLM31.23	Amber	617 nm	White SMT package, colorless clear resin	100 mA	200 mA	22.3 lm	2.11 V	106 lm/W
GA PSLR31.13	Amber	610 nm	White SMT package, colored diffused silicone resin	150 mA	200 mA	55 lm	6.25 V	59 lm/W
GB PSLM31.13	Blue	470 nm	White SMT package, colorless clear resin	100 mA	200 mA	9 lm	2.85 V	32 lm/W
GR PSLM31.23	Red	623 nm	White SMT package, colorless clear resin	100 mA	200 mA	19 lm	2.11 V	92 lm/W
GR PSLR31.13	Red	620 nm	White SMT package, colored diffused silicone resin	150 mA	200 mA	29 lm	6.25 V	31 lm/W
GT PSLM31.13	True Green	528 nm	White SMT package, colorless clear resin	100 mA	200 mA	36.6 lm	2.70 V	135 lm/W
GT PSLR31.13	True Green	540 nm	White SMT package, colored diffused silicone resin	150 mA	200 mA	176 lm	6.25 V	188 lm/W

DURIS E 2835



Product Code	Colour	Typ. Wavelength	Package	Binning Current	Max Driving Current	Forwad Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux
GD JTLPS1.14	Deep Blue	455 nm	White SMT package colorless clear silicone resin	150 mA	250 mA	3.0 V	286 mW	65%	1.07 µmol/s
GF JTLPS1.24	Far Red	727 nm		150 mA	180 mA	1.9 V	103 mW	36%	0.08 µmol/s
GH JTLPS1.24	Hyper Red	657 nm		150 mA	180 mA	2.2 V	132 mW	40%	0.72 µmol/s

Product Code	Colour	Package	Binning Current	Max Driving Current	Forwad Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux	Typ. Photon Efficacy
GP JTLPS1.14	Purple	White SMT package colorless clear silicone resin	150 mA	350 mA	2.9 V	203 mW	48%	0.93 µmol/s	2.56 µmol/J

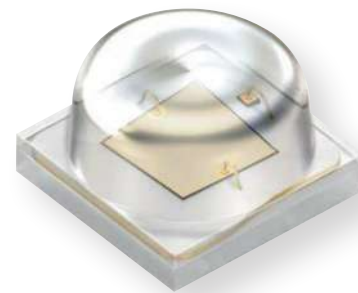
DURIS S 5



Product Code	Colour	Package	Binning Current	Max Driving Current	Forwad Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux	Typ. Photon Efficacy
GP PSLM31.14	Purple	White SMT package colorless clear silicone resin	100 mA	400 mA	2.81 V	128 mW	45%	0.58 µmol/s	2.07 µmol/j
GP PSLR31.14	Purple		150 mA	200 mA	6.24 V	350 mW	37%	1.59 µmol/s	1.66 µmol/j

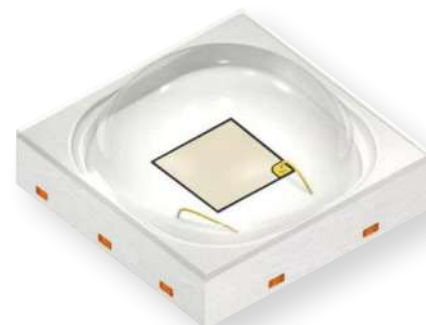
HORTICULTURE LED CHIP

OSLON SQUARE 3030



Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Forward Voltage	Typ. Radiant Flux	Typ. Radiant Efficiency	Typ. Photosynthetic Photon Flux	Typ. Photon Efficacy
GD CSBRM2.14	Deep Blue	450 nm	White SMT package with clear silicone lens	700 mA	2000 mA	2.90 V	1490 mW @700mA 785 mW @350mA	73% @700mA 80% @350mA	5.53 µmol/s @700mA 2.91 µmol/s @350mA	2.72 µmol/J @700mA 2.96 µmol/J @350mA
GD CSSRM2.14	Deep Blue	450 nm		700 mA	2000 mA	2.90 V	1507 mW @700mA 791 mW @350mA	74 % @700mA 82 % @350mA	5.69 µmol/s	
GH CSBRM4.24	Hyper Red	657 nm		700 mA	1400 mA	2.00 V	1045 mW @700mA 529 mW @350mA	75% @700mA 80% @350mA	5.75 µmol/s @700mA 2.91 µmol/s @350mA	4.11 µmol/J @700mA 4.42 µmol/J @350mA
GH CSSRM4.24	Hyper Red	657 nm		700 mA	1400 mA	2.02 V	1045 mW @700mA 530 mW @350mA	74% @700mA 81% @350mA	5.74 µmol/s @700mA 2.91 µmol/s @350mA	4.04 µmol/J @700mA 4.42 µmol/J @350mA

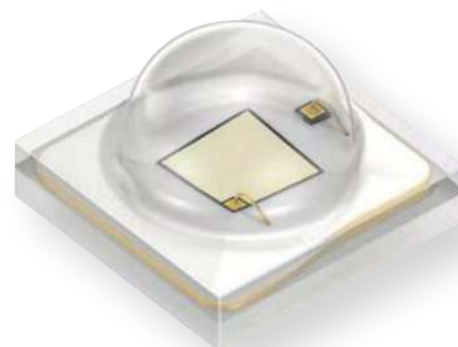
OSCONIQ P 3030



Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current
GB QSSPA1.13	Blue	470 nm	SMD epoxy package	350 mA	1300 mA	45 lm	2.93 V	44 lm/W
GR QSSPA1.23	Red	623 nm		350 mA	1000 mA	87 lm	2.18 V	115 lm/W
GT QSSPA1.13	True Green	528 nm		350 mA	1300 mA	150 lm	2.70 V	159 lm/W
GV QSSPA1.13	Verde	494 nm		350 mA	1300 mA	90 lm	2.93 V	88 lm/W

Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Forward Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux
GD QSSPA1.14	Deep Blue	449 nm	SMD epoxy package	350 mA	1300 mA	2.85 V	760 mW	75%	2.87 µmol/s
GH QSSPA1.24	Hyper Red	640 nm		350 mA	1000 mA	2.10 V	440 mW	59%	2.37 µmol/s

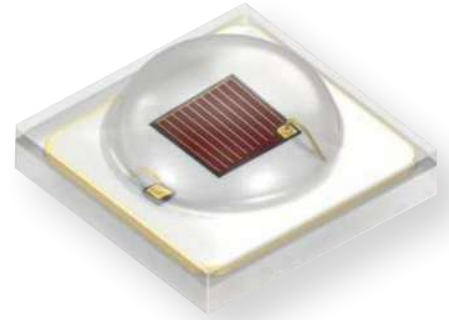
OSLON SSL 3030 120°



Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Forward Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux
GD CSSPM1.14	Deep Blue	450 nm	SMT ceramic package with silicone lens	350 mA	1000 mA	2.85 V	739 mW	74%	2.78 µmol/s
GH CSSPM1.24	Hyper Red	640 nm		350 mA	1000 mA	2.07 V	475 mW	65%	2.58 µmol/s

HORTICULTURE LED CHIP

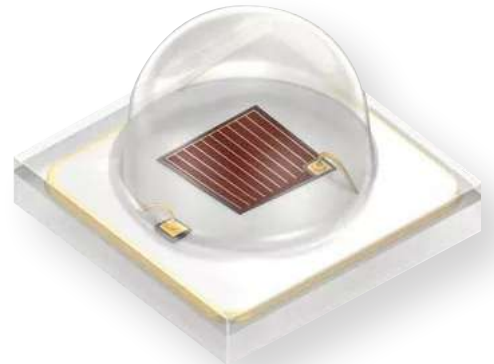
OSLON SSL 3030 150°



Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Forward Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux
GD CSHPM1.14	Deep Blue	455 nm	SMT ceramic package with silicone lens	350 mA	1000 mA	2.85 V	753 mW	75%	2.74µmol/s

Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current
GA CSHPM1.23	Amber	617 nm	SMT ceramic package with silicone lens	350 mA	1000 mA	116 lm	2.10 V	157 lm/W
GR CSHPM1.23	Red	623 nm		350 mA	1000 mA	86 lm	2.10 V	117 lm/W

OSLON SSL 3030 80°



Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Forward Voltage	Typ. Radiant Flux	Typ. Radiant Efficacy	Typ. Photosynthetic Photon Flux
GD CS8PM1.14	Deep Blue	455 nm	SMT ceramic package with silicone lens	350 mA	1000 mA	2.85 V	727 mW	72%	2.74µmol/s
GH CS8PM1.24	Hyper Red	640 nm		350 mA	1000 mA	2.07 V	463 mW	63%	2.52 µmol/s

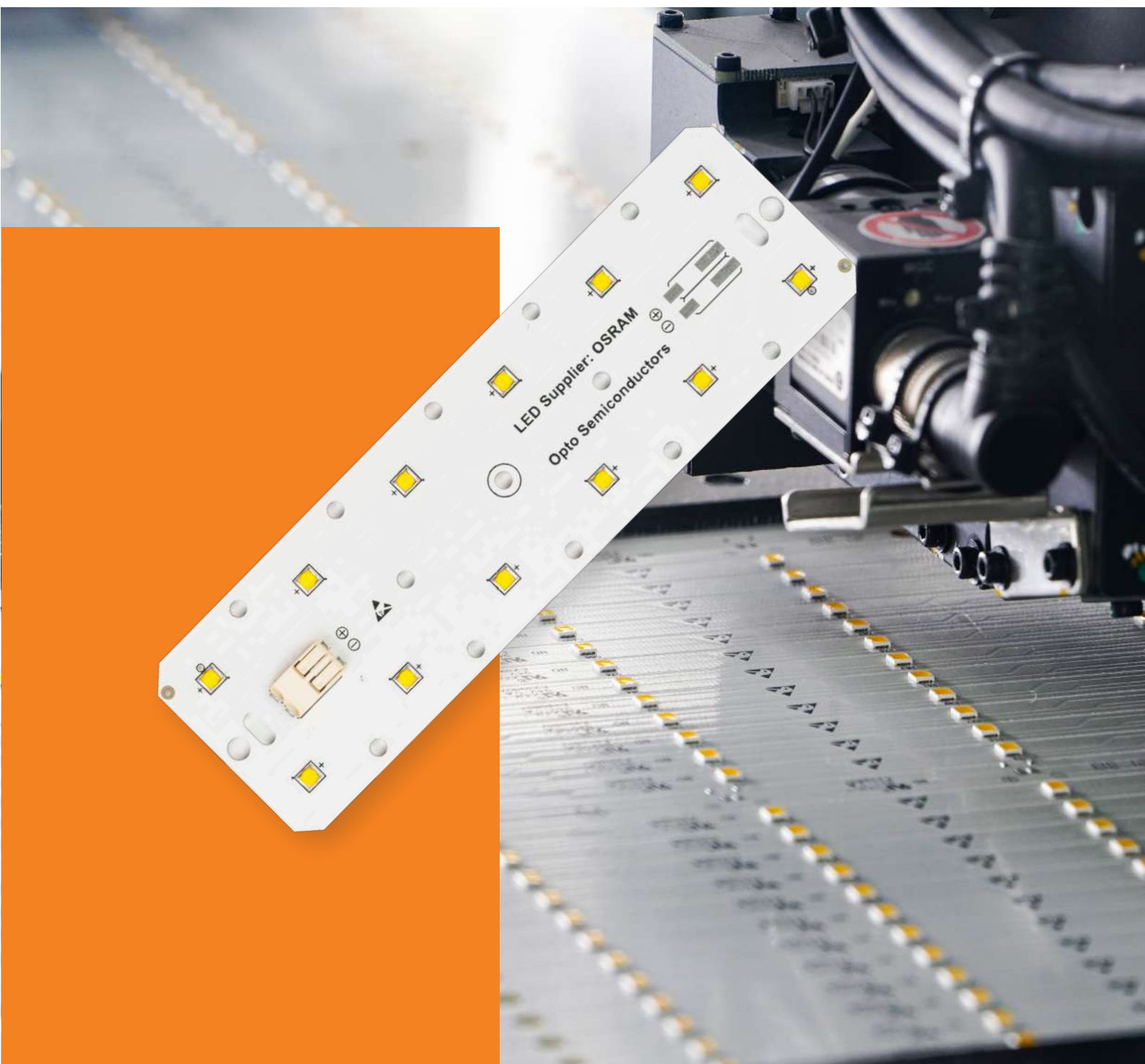
Product Code	Colour	Wavelength	Package	Binning Current	Max Driving Current	Typ. Flux @25 °C	Typ. Forward Voltage	Typ. Efficacy @Bining Current
GA CS8PM1.23	Amber	617 nm	SMT ceramic package with silicone lens	350 mA	1000 mA	112 lm	2.10 V	152 lm/W



LED Modules

Indoor - Outdoor Lighting **LED MODULES**

We reserve the right to change dimensions.



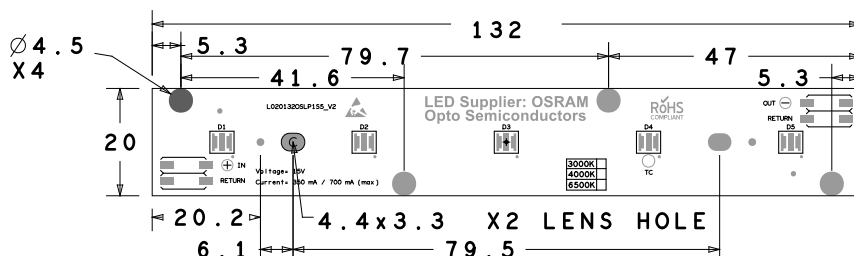
LNR-AL1-132X20X1.6-SQRX05 ⁽¹⁾



Lenses	Qty
Darkool 5IN1 Reflector Set 12°	1
Darkool 5IN1 Reflector Set 34°	1
Darkool 5IN1 Reflector Set 48°	1

Housing / Heatsink

LP-75



Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-132x20-SQRx05-30	350 mA	3000K	5	1	5	802 855	13,30	14,30	5,00	≥70
LNR-AL1-132x20-SQRx05-40		4000K	5	1	5	881 934	13,30	14,30	5,00	≥70
LNR-AL1-132x20-SQRx05-65		6500K	5	1	5	855 908	13,30	14,30	5,00	≥70
LNR-AL1-132x20-SQRx05-30	500 mA	3000K	5	1	5	1113 1186	13,30	14,30	7,15	≥70
LNR-AL1-132x20-SQRx05-40		4000K	5	1	5	1223 1296	13,30	14,30	7,15	≥70
LNR-AL1-132x20-SQRx05-65		6500K	5	1	5	1186 1259	13,30	14,30	7,15	≥70
LNR-AL1-132x20-SQRx05-30	700 mA	3000K	5	1	5	1508 1607	13,30	14,30	10,01	≥70
LNR-AL1-132x20-SQRx05-40		4000K	5	1	5	1656 1755	13,30	14,30	10,01	≥70
LNR-AL1-132x20-SQRx05-65		6500K	5	1	5	1607 1706	13,30	14,30	10,01	≥70
LNR-AL1-132x20-SQRx05-30	1050 mA	3000K	5	1	5	2144 2285	13,30	14,30	15,02	≥70
LNR-AL1-132x20-SQRx05-40		4000K	5	1	5	2355 2496	13,30	14,30	15,02	≥70
LNR-AL1-132x20-SQRx05-65		6500K	5	1	5	2285 2425	13,30	14,30	15,02	≥70

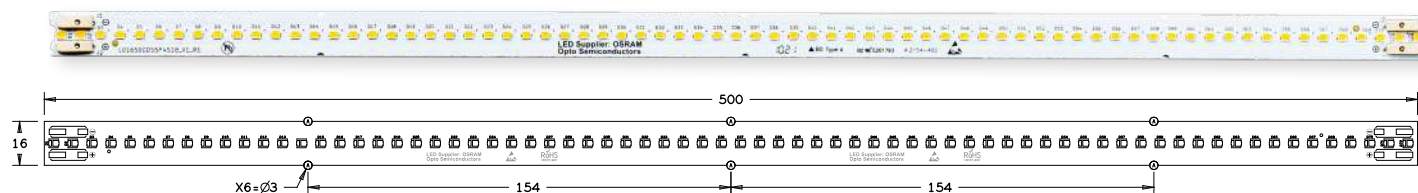
Tolerance range for optical data $\pm 10\%$, Tolerance range for electrical data $\pm 4\%$

LNR-AL1-500X16X1.6-D28X72 ⁽²⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1

Housing / Heatsink

LP-20 / LP-61/ETJ-60 / ETJ-PC78



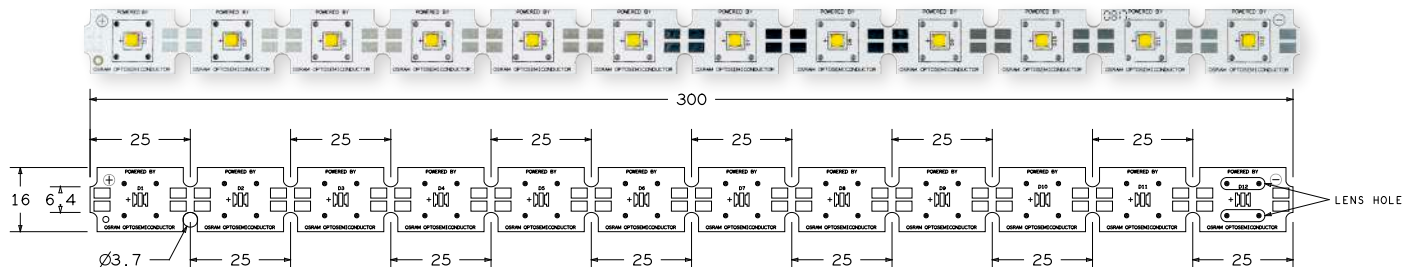
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Min.Forward Voltage @ts=45 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-500X16-D28x72-302K	350 mA	3000K	72	4	18	2597 3042	2533 2968	55,44	56,16	19,66	≥80
LNR-AL1-500X16-D28x72-402K		6000K	72	4	18	2597 3042	2533 2968	55,44	56,16	19,66	≥80
LNR-AL1-500X16-D28x72-652K		5000K	72	4	18	2597 3042	2533 2968	55,44	56,16	19,66	≥80

Tolerance range for optical data $\pm 10\%$. Tolerance range for electrical data $\pm 4\%$

LINEAR LED MODULES

LNR-AL1-300X16X1.6-SQRX12 ⁽¹⁾

Lenses	Qty
BICOM Single Lens 15°	12
BICOM Single Lens 28°	12
BICOM Single Lens 42°	12
Housing / Heatsink	
DB-01 / DB-67	

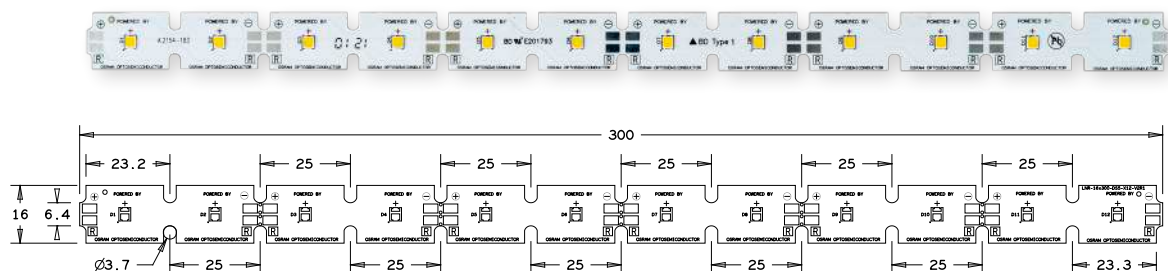


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-300x16-SQRx12-30	350 mA	3000K	12	1	12	1926 2052	31,92	34,32	12,01	≥70
LNR-AL1-300x16-SQRx12-40		4000K	12	1	12	2115 2242	31,92	34,32	12,01	≥70
LNR-AL1-300x16-SQRx12-65		6500K	12	1	12	2052 2179	31,92	34,32	12,01	≥70
LNR-AL1-300x16-SQRx12-30	500 mA	3000K	12	1	12	2672 2848	31,92	34,32	17,16	≥70
LNR-AL1-300x16-SQRx12-40		4000K	12	1	12	2935 3110	31,92	34,32	17,16	≥70
LNR-AL1-300x16-SQRx12-65		6500K	12	1	12	2848 3023	31,92	34,32	17,16	≥70
LNR-AL1-300x16-SQRx12-30	700 mA	3000K	12	1	12	3620 3857	31,92	34,32	24,02	≥70
LNR-AL1-300x16-SQRx12-40		4000K	12	1	12	3976 4213	31,92	34,32	24,02	≥70
LNR-AL1-300x16-SQRx12-65		6500K	12	1	12	3857 4095	31,92	34,32	24,02	≥70
LNR-AL1-300x16-SQRx12-30	1050 mA	3000K	12	1	12	5148 5486	31,92	34,32	36,04	≥70
LNR-AL1-300x16-SQRx12-40		4000K	12	1	12	5655 5992	31,92	34,32	36,04	≥70
LNR-AL1-300x16-SQRx12-65		6500K	12	1	12	5486 5823	31,92	34,32	36,04	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LNR-AL1-300X16X1.6-DS5X12 ⁽³⁾

Lenses	Qty
BICOM Single Lens 15°	12
BICOM Single Lens 28°	12
BICOM Single Lens 42°	12
Housing / Heatsink	
DB-01 / DB-67	



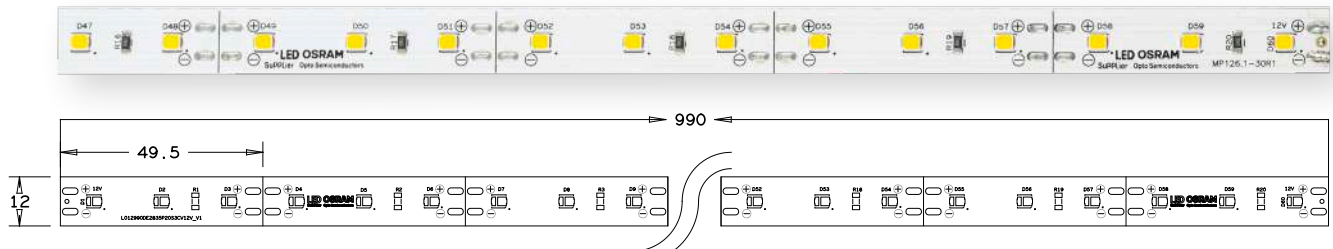
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-300X16-DS5V1x12-30	350 mA	3000K	12	2	6	2005 2141	1873 2000	36,06	37,02	12,96	≥70
LNR-AL1-300X16-DS5V1x12-40		6000K	12	2	6	2073 2209	1937 2064	36,06	37,02	12,96	≥70
LNR-AL1-300X16-DS5V1x12-65		5000K	12	2	6	2005 2141	1873 2000	36,06	37,02	12,96	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LINEAR LED MODULES

LNR-AL1-990X12X1.6-D28X60-V12 ⁽²⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
FL-12 / FL-08 / FL-10 / FL-17	

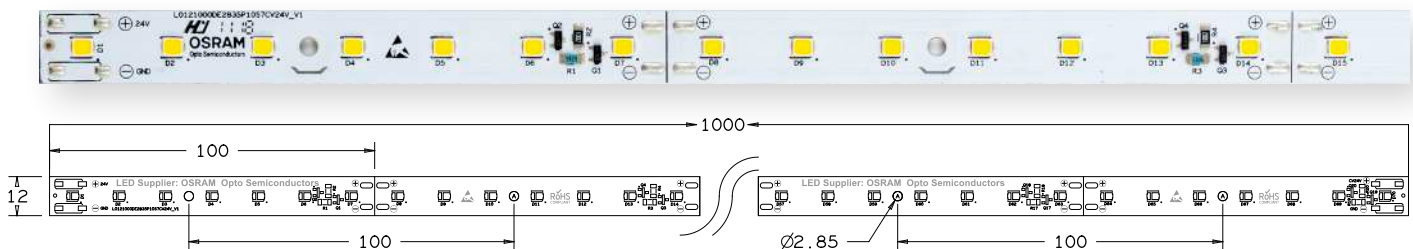


Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-990x12-D28X60-302K	3000K	60	20	3	2078 2433	2077 2374	12	20	≥80
LNR-AL1-990x12-D28X60-402K	4000K	60	20	3	2078 2433	2077 2374	12	20	≥80
LNR-AL1-990x12-D28X60-652K	6500K	60	20	3	2078 2433	2077 2374	12	20	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LNR-AL1-1000X12X1.6-D28X70-V24 ⁽²⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
FL-12 / FL-08 / FL-10 / FL-17	



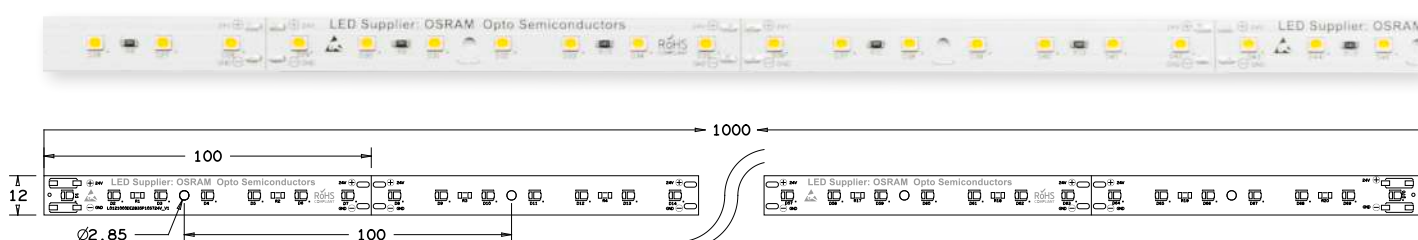
Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-1000x12-D28X70-302K	3000K	70	10	7	2593 3036	2529 2962	24	21,60	≥80
LNR-AL1-1000x12-D28X70-402K	4000K	70	10	7	2593 3036	2529 2962	24	21,60	≥80
LNR-AL1-1000x12-D28X70-652K	6500K	70	10	7	2593 3036	2529 2962	24	21,60	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LINEAR LED MODULES

LNR-AL1-1000X12X1.6-D28X70-V24 - ECO SERIES ⁽⁴⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
FL-12 / FL-08 / FL-10 / FL-17	

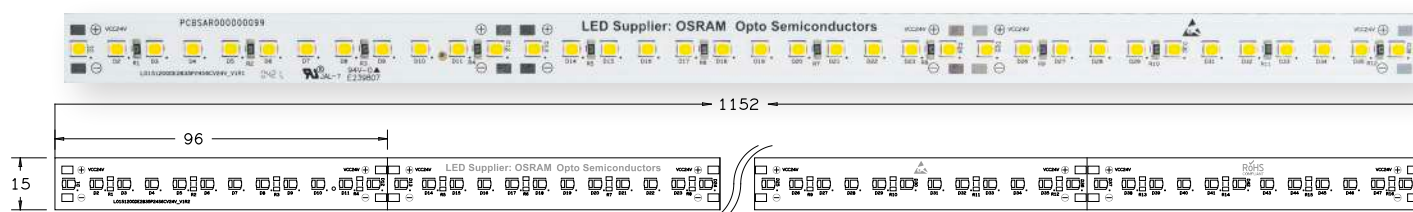


Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-1000x12-D28X70-301K	3000K	70	10	7	1647 2076	1570 1980	24	15,00	≥80
LNR-AL1-1000x12-D28X70-401K	4000K	70	10	7	1647 2076	1570 1980	24	15,00	≥80
LNR-AL1-1000x12-D28X70-651K	6500K	70	10	7	1647 2076	1570 1980	24	15,00	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LNR-AL1-1152X15X1.6-DE28X144-V24 ⁽⁴⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
FL-03 / FL-05 / FL-20	



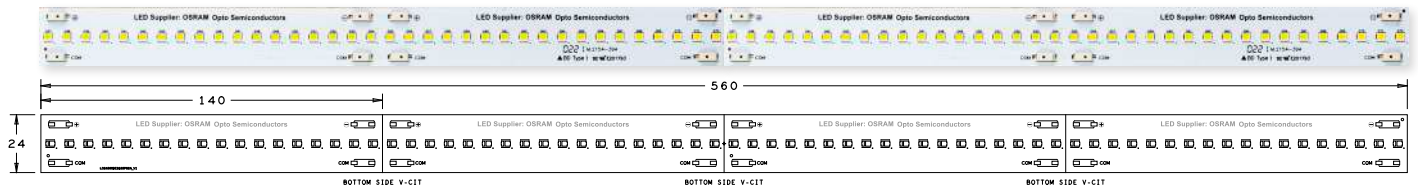
Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-1152x15-D28X144-301K	3000K	144	24	6	2794 3523	2664 3359	24	30,00	≥80
LNR-AL1-1152x15-D28X144-401K	4000K	144	24	6	2794 3523	2664 3359	24	30,00	≥80
LNR-AL1-1152x15-D28X144-651K	6500K	144	24	6	2794 3523	2664 3359	24	30,00	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LINEAR LED MODULES

LNR-CM1-560X24X1.6-D28X72 ⁽²⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
LP-20 / LP-61 / ETJ-60 / ETJ-PC78	

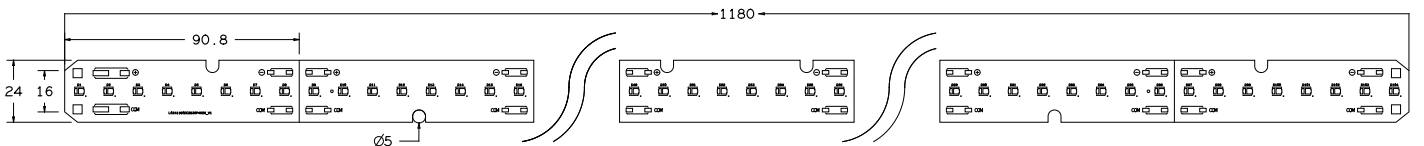


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Min.Forward Voltage @ts=45 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-CM1-560X24-D28x72-302K	350 mA	3000K	72	3	24	3315 3883	3232 3786	73,92	74,88	26,21	≥80
LNR-CM1-560X24-D28x72-402K		6000K	72	3	24	3315 3883	3232 3786	73,92	74,88	26,21	≥80
LNR-CM1-560X24-D28x72-652K		5000K	72	3	24	3315 3883	3232 3786	73,92	74,88	26,21	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LNR-FR4-1180X24X1.6-D28X104 ⁽²⁾

Lenses	Qty
NANOPTIQS IQ Linear NILO 1 Symmetrical 14°	1
NANOPTIQS IQ Linear NILO 2 Symmetrical 19°	1
NANOPTIQS IQ Linear DARLO 1 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear DARLO 2 Single Asymmetrical 21°	1
NANOPTIQS IQ Linear ELBO 1 Double Asymmetrical 57x11°	1
NANOPTIQS IQ Linear ELBO 2 Double Asymmetrical 54x17°	1
NANOPTIQS IQ Linear ELBO 3 Double Asymmetrical 76x38°	1
NANOPTIQS IQ Linear NUBO 1 Batwing 80°	1
Housing / Heatsink	
LP-20 / LP-61 / ETJ-60 / ETJ-PC78	



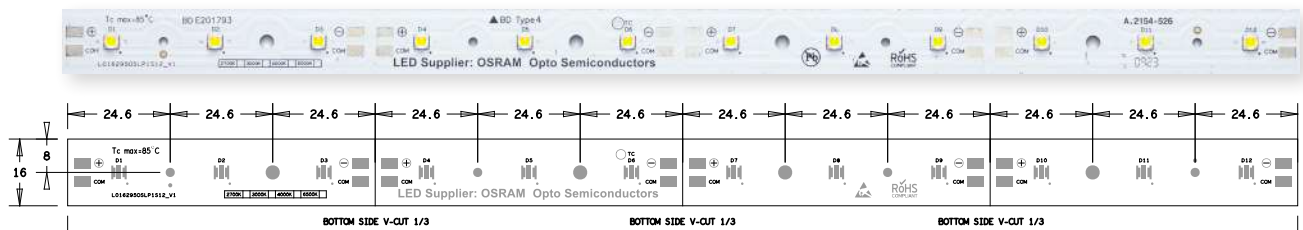
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-FR4-1180X24-D28x104-302K	350 mA	3000K	104	4	26	3751 4395	3659 4287	80,08	81,12	28,39	≥80
LNR-FR4-1180X24-D28x104-402K		4000K	104	4	26	3751 4395	3659 4287	80,08	81,12	28,39	≥80
LNR-FR4-1180X24-D28x104-652K		6500K	104	4	26	3751 4395	3659 4287	80,08	81,12	28,39	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LINEAR LED MODULES

LNR-AL1-295X16X1.6-SQRX12 ⁽¹⁾

Lenses	Qty
Khatod VENUS 1x12 Wallwasher Lens 15°	1
Khatod VENUS 1x12 Wallwasher Lens 25°	1
Khatod VENUS 1x12 Wallwasher Lens 15x45°	1
Housing / Heatsink	
DB-01 / DB-67	

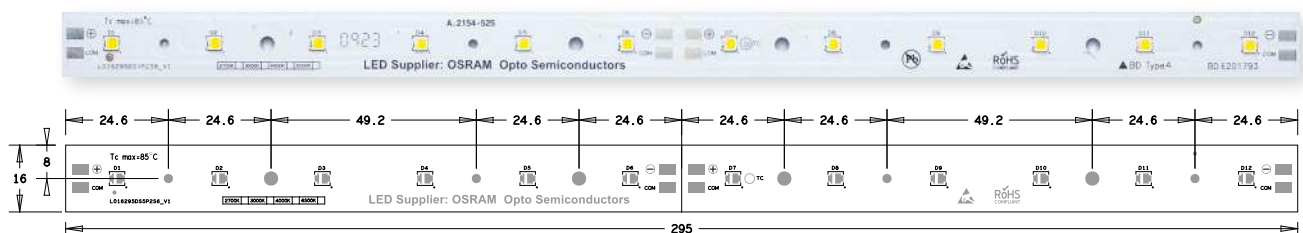


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-132x20-SQRx05-30	350 mA	3000K	12	1	12	1926 2052	31,92	34,32	12,01	≥70
LNR-AL1-132x20-SQRx05-40		4000K	12	1	12	2115 2242	31,92	34,32	12,01	≥70
LNR-AL1-132x20-SQRx05-65		6500K	12	1	12	2052 2179	31,92	34,32	12,01	≥70
LNR-AL1-132x20-SQRx05-30	500 mA	3000K	12	1	12	2672 2848	31,92	34,32	17,16	≥70
LNR-AL1-132x20-SQRx05-40		4000K	12	1	12	2935 3110	31,92	34,32	17,16	≥70
LNR-AL1-132x20-SQRx05-65		6500K	12	1	12	2848 3023	31,92	34,32	17,16	≥70
LNR-AL1-132x20-SQRx05-30	700 mA	3000K	12	1	12	3620 3857	31,92	34,32	24,02	≥70
LNR-AL1-132x20-SQRx05-40		4000K	12	1	12	3976 4213	31,92	34,32	24,02	≥70
LNR-AL1-132x20-SQRx05-65		6500K	12	1	12	3857 4095	31,92	34,32	24,02	≥70
LNR-AL1-132x20-SQRx05-30	1050 mA	3000K	12	1	12	5148 5486	31,92	34,32	36,04	≥70
LNR-AL1-132x20-SQRx05-40		4000K	12	1	12	5655 5992	31,92	34,32	36,04	≥70
LNR-AL1-132x20-SQRx05-65		6500K	12	1	12	5486 5823	31,92	34,32	36,04	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LNR-AL1-295X16X1.6-DS5X12 ⁽¹⁾

Lenses	Qty
Khatod VENUS 1x12 Wallwasher Lens 15°	1
Khatod VENUS 1x12 Wallwasher Lens 25°	1
Khatod VENUS 1x12 Wallwasher Lens 15x45°	1
Housing / Heatsink	
DB-01 / DB-67	



Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-295X16-DS5V1x12-30	350 mA	12	2	6	26	2005 2141	1873 2000	36,06	37,02	12,96	≥70
LNR-AL1-295X16-DS5V1x12-40		12	2	6	26	2073 2209	1937 2064	36,06	37,02	12,96	≥70
LNR-AL1-295X16-DS5V1x12-65		12	2	6	26	2005 2141	1873 2000	36,06	37,02	12,96	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

LINEAR LED MODULES

(1)

OSLON SQUARE

- 3000K GW CSSRM3.PM-N3N5-XX57
- 4000K GW CSSRM3.PM-N6N8-XX55
- 6500K GW CSSRM3.PM-N5N7-XX51

Features of LED

- LED type : OSRAM OSLON SQUARE
- LED case : 3.0x3.0 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 1800mA
- Thermal resistance(typ.) : 1.8 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum
- Thicknees : 1.6mm
- Suitable for linear illluminatıon
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

(2)

DURIS E2835

- 3000K GW JTLMS1.EM-GVH2-XX57
- 4000K GW JTLMS1.EM-GVH2-XX55
- 6500K GW JTLMS1.EM-GVH2-XX51

Features of LED

- LED type : OSRAM DURIS E2835
- LED case : 2.8x3.5 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 150mA
- Thermal resistance(typ.) : 15 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum / Cem1 / FR4
- Thicknees : 1.6mm
- Suitable for linear illluminatıon
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

(3)

DURIS S5V1

- 3000K GW PSLT33.PM-LYL1-XX57
- 4000K GW PSLT33.PM-LZL2-XX55
- 6500K GW PSLT33.PM-LYL1-XX51

Features of LED

- LED type : OSRAM Duris S5 V1
- LED case : 3.0x3.0 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 200mA
- Voltage : 6.2V
- Thermal resistance(typ.) : 8.9 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum
- Thicknees : 1.6mm
- Suitable for linear illluminatıon
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

(4)

DURIS E2835

- 3000K GW JTLMSX.EM-B8A2-30S5
- 4000K GW JTLMSX.EM-B8A2-40S5
- 6500K GW JTLMSX.EM-B8A2-65S5

Features of LED

- LED type : OSRAM DURIS E2835
- LED case : 2.8x3.5 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 90mA
- Thermal resistance(typ.) : 25 K/
- LM80 Test Report

Features of LED MODULE

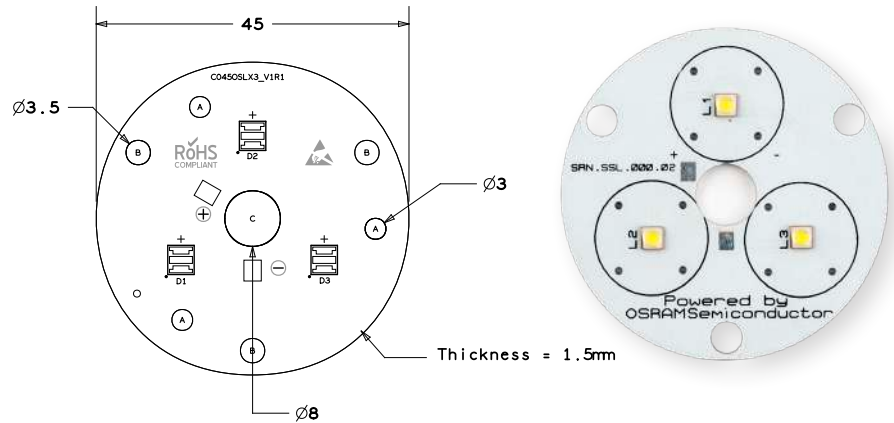
- PCB Material : Aluminum
- Thicknees : 1.6mm
- Suitable for linear illluminatıon
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty



CIRCULAR LED MODULES

CRL-AL1-45X1.6-SQRX03 (1)

Lenses	Qty
3IN1 25° Lens	1
3IN1 50° Lens	1
3IN1 35x70° Lens	1
BICOM Single Lens 15°	3
BICOM Single Lens 28°	3
BICOM Single Lens 42°	3
Housing / Heatsink	
LS-50 / LS-45	

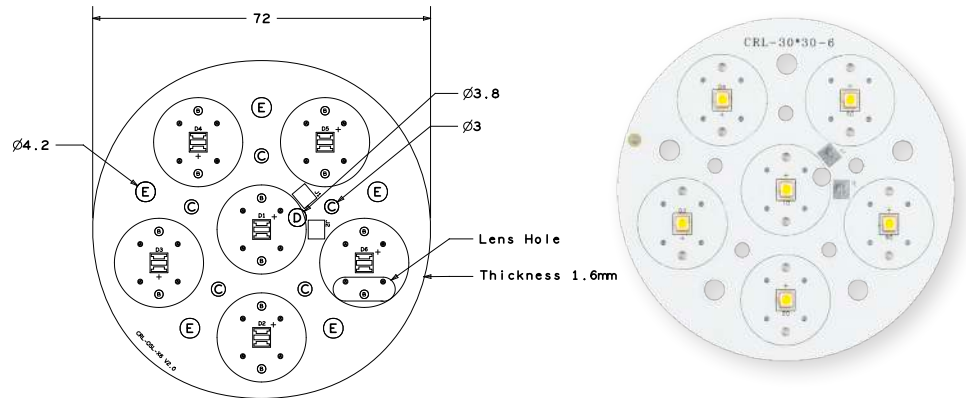


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
CRL-AL1-45x1.6-SQRx03-30	350 mA	3000K	3	1	3	482 513	7,98	8,58	3,00	≥70
CRL-AL1-45x1.6-SQRx03-40		4000K	3	1	3	528 558	7,98	8,58	3,00	≥70
CRL-AL1-45x1.6-SQRx03-65		6500K	3	1	3	513 543	7,98	8,58	3,00	≥70
CRL-AL1-45x1.6-SQRx03-30	500 mA	3000K	3	1	3	669 711	7,98	8,58	4,29	≥70
CRL-AL1-45x1.6-SQRx03-40		4000K	3	1	3	735 777	7,98	8,58	4,29	≥70
CRL-AL1-45x1.6-SQRx03-65		6500K	3	1	3	711 756	7,98	8,58	4,29	≥70
CRL-AL1-45x1.6-SQRx03-30	700 mA	3000K	3	1	3	906 963	7,98	8,58	6,00	≥70
CRL-AL1-45x1.6-SQRx03-40		4000K	3	1	3	993 1053	7,98	8,58	6,00	≥70
CRL-AL1-45x1.6-SQRx03-65		6500K	3	1	3	963 1023	7,98	8,58	6,00	≥70
CRL-AL1-45x1.6-SQRx03-30	1050 mA	3000K	3	1	3	1287 1371	7,98	8,58	9,00	≥70
CRL-AL1-45x1.6-SQRx03-40		4000K	3	1	3	1413 1497	7,98	8,58	9,00	≥70
CRL-AL1-45x1.6-SQRx03-65		6500K	3	1	3	1371 1455	7,98	8,58	9,00	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CRL-AL1-72X1.6-SQRX06 (1)

Lenses	Qty
6IN1 30° Lens	1
6IN1 50° Lens	1
6IN1 35x70° Lens	1
BICOM Single Lens 15°	6
BICOM Single Lens 28°	6
BICOM Single Lens 42°	6
Housing / Heatsink	
LSK-95 / LS-80	



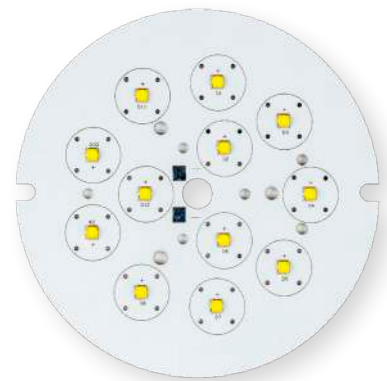
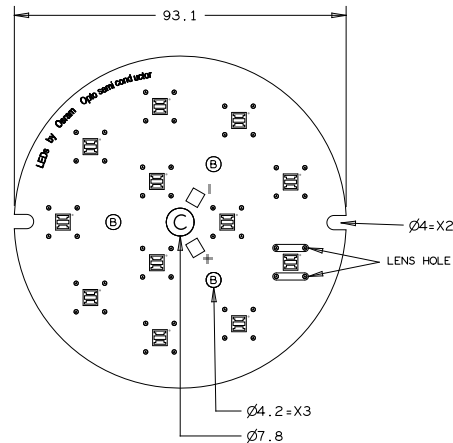
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
CRL-AL1-72x1.6-SQRx06-30	350 mA	3000K	6	1	6	963 1026	15,96	17,16	6,00	≥70
CRL-AL1-72x1.6-SQRx06-40		4000K	6	1	6	1056 1116	15,96	17,16	6,00	≥70
CRL-AL1-72x1.6-SQRx06-65		6500K	6	1	6	1026 1086	15,96	17,16	6,00	≥70
CRL-AL1-72x1.6-SQRx06-30	500 mA	3000K	6	1	6	1338 1422	15,96	17,16	8,58	≥70
CRL-AL1-72x1.6-SQRx06-40		4000K	6	1	6	1470 1554	15,96	17,16	8,58	≥70
CRL-AL1-72x1.6-SQRx06-65		6500K	6	1	6	1422 1512	15,96	17,16	8,58	≥70
CRL-AL1-72x1.6-SQRx06-30	700 mA	3000K	6	1	6	1812 1926	15,96	17,16	12,01	≥70
CRL-AL1-72x1.6-SQRx06-40		4000K	6	1	6	1986 2106	15,96	17,16	12,01	≥70
CRL-AL1-72x1.6-SQRx06-65		6500K	6	1	6	1926 2046	15,96	17,16	12,01	≥70
CRL-AL1-72x1.6-SQRx06-30	1050 mA	3000K	6	1	6	2574 2742	15,96	17,16	18,02	≥70
CRL-AL1-72x1.6-SQRx06-40		4000K	6	1	6	2826 2994	15,96	17,16	18,02	≥70
CRL-AL1-72x1.6-SQRx06-65		6500K	6	1	6	2742 2910	15,96	17,16	18,02	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CIRCULAR LED MODULES

CRL-AL1-93X1.6-SQRX12 ⁽¹⁾

Lenses	Qty
12IN1 30° Lens	1
12IN1 50° Lens	1
12IN1 35x70° Lens	1
BICOM Single Lens 15°	12
BICOM Single Lens 28°	12
BICOM Single Lens 42°	12
Housing / Heatsink	
LSD-105 / BULK HEAD / LSK-114	

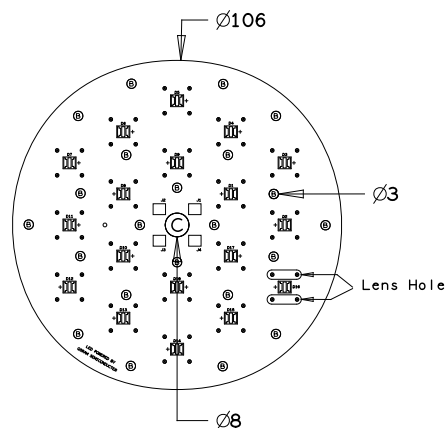


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
CRL-AL1-93x1.6-SQRx12-30	350 mA	3000K	12	1	12	1926 2052	31,92	34,32	12,01	≥70
CRL-AL1-93x1.6-SQRx12-40		4000K	12	1	12	2115 2242	31,92	34,32	12,01	≥70
CRL-AL1-93x1.6-SQRx12-65		6500K	12	1	12	2052 2179	31,92	34,32	12,01	≥70
CRL-AL1-93x1.6-SQRx12-30	500 mA	3000K	12	1	12	2672 2848	31,92	34,32	17,16	≥70
CRL-AL1-93x1.6-SQRx12-40		4000K	12	1	12	2935 3110	31,92	34,32	17,16	≥70
CRL-AL1-93x1.6-SQRx12-65		6500K	12	1	12	2848 3023	31,92	34,32	17,16	≥70
CRL-AL1-93x1.6-SQRx12-30	700 mA	3000K	12	1	12	3620 3857	31,92	34,32	24,02	≥70
CRL-AL1-93x1.6-SQRx12-40		4000K	12	1	12	3976 4213	31,92	34,32	24,02	≥70
CRL-AL1-93x1.6-SQRx12-65		6500K	12	1	12	3857 4095	31,92	34,32	24,02	≥70
CRL-AL1-93x1.6-SQRx12-30	1050 mA	3000K	12	1	12	5148 5486	31,92	34,32	36,04	≥70
CRL-AL1-93x1.6-SQRx12-40		4000K	12	1	12	5655 5992	31,92	34,32	36,04	≥70
CRL-AL1-93x1.6-SQRx12-65		6500K	12	1	12	5486 5823	31,92	34,32	36,04	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CRL-AL1-106X1.6-SQRX18 ⁽¹⁾

Lenses	Qty
18IN1 30° Lens	1
18IN1 50° Lens	1
18IN1 35x70° Lens	1
BICOM Single Lens 15°	18
BICOM Single Lens 28°	18
BICOM Single Lens 42°	18
Housing / Heatsink	
LSD-120 / BULK HEAD / LS-110 / LSK-114	



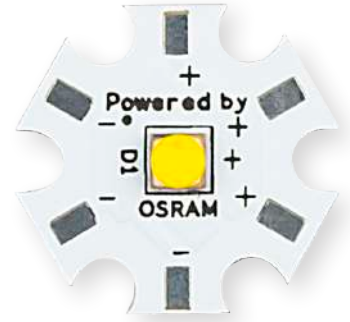
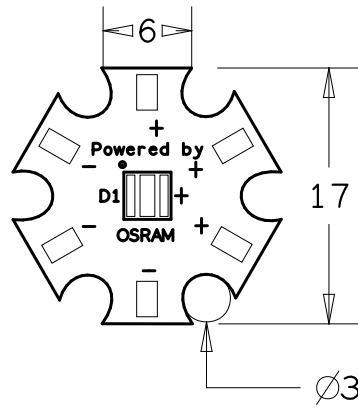
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
CRL-AL1-106x1.6-SQRx18-30	350 mA	3000K	18	1	18	2889 3078	47,88	51,48	18,02	≥70
CRL-AL1-106x1.6-SQRx18-40		4000K	18	1	18	3173 3362	47,88	51,48	18,02	≥70
CRL-AL1-106x1.6-SQRx18-65		6500K	18	1	18	3078 3267	47,88	51,48	18,02	≥70
CRL-AL1-106x1.6-SQRx18-30	500 mA	3000K	18	1	18	4008 4271	47,88	51,48	25,74	≥70
CRL-AL1-106x1.6-SQRx18-40		4000K	18	1	18	4402 4665	47,88	51,48	25,74	≥70
CRL-AL1-106x1.6-SQRx18-65		6500K	18	1	18	4271 4533	47,88	51,48	25,74	≥70
CRL-AL1-106x1.6-SQRx18-30	700 mA	3000K	18	1	18	5429 5785	47,88	51,48	36,04	≥70
CRL-AL1-106x1.6-SQRx18-40		4000K	18	1	18	5963 6319	47,88	51,48	36,04	≥70
CRL-AL1-106x1.6-SQRx18-65		6500K	18	1	18	5785 6141	47,88	51,48	36,04	≥70
CRL-AL1-106x1.6-SQRx18-30	1050 mA	3000K	18	1	18	7719 8226	47,88	51,48	54,05	≥70
CRL-AL1-106x1.6-SQRx18-40		4000K	18	1	18	8479 8985	47,88	51,48	54,05	≥70
CRL-AL1-106x1.6-SQRx18-65		6500K	18	1	18	8226 8732	47,88	51,48	54,05	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CIRCULAR LED MODULES

STR-AL1-17X1.6-SQRX01 ⁽¹⁾

Lenses	Qty
BICOM Single Lens 15°	1
BICOM Single Lens 28°	1
BICOM Single Lens 42°	1
Housing / Heatsink	
LS-25	

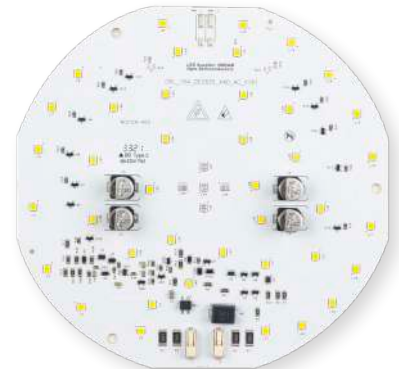
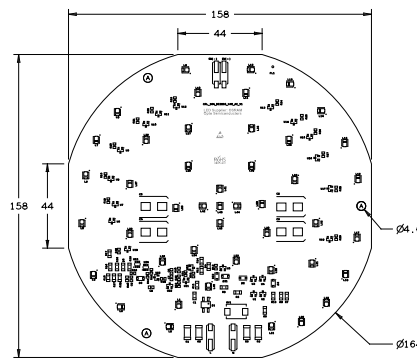


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
STR-AL1-17x1.6-SQRx01-30	350 mA	3000K	1	1	1	161 171	2,66	2,86	1,00	≥70
STR-AL1-17x1.6-SQRx01-40		4000K	1	1	1	176 186	2,66	2,86	1,00	≥70
STR-AL1-17x1.6-SQRx01-65		6500K	1	1	1	171 181	2,66	2,86	1,00	≥70
STR-AL1-17x1.6-SQRx01-30	500 mA	3000K	1	1	1	223 237	2,66	2,86	1,43	≥70
STR-AL1-17x1.6-SQRx01-40		4000K	1	1	1	245 259	2,66	2,86	1,43	≥70
STR-AL1-17x1.6-SQRx01-65		6500K	1	1	1	237 252	2,66	2,86	1,43	≥70
STR-AL1-17x1.6-SQRx01-30	700 mA	3000K	1	1	1	302 321	2,66	2,86	2,00	≥70
STR-AL1-17x1.6-SQRx01-40		4000K	1	1	1	331 351	2,66	2,86	2,00	≥70
STR-AL1-17x1.6-SQRx01-65		6500K	1	1	1	321 341	2,66	2,86	2,00	≥70
STR-AL1-17x1.6-SQRx01-30	1050 mA	3000K	1	1	1	429 457	2,66	2,86	3,00	≥70
STR-AL1-17x1.6-SQRx01-40		4000K	1	1	1	471 499	2,66	2,86	3,00	≥70
STR-AL1-17x1.6-SQRx01-65		6500K	1	1	1	457 485	2,66	2,86	3,00	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CRL-CEM3-164X1.6-D28X40-220VAC ⁽²⁾

Housing / Heatsink
BOLART / NEW BULK HEAD



Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Luminous Flux @ ts=25 °C (lm)	Total Harmonic Distortion	Power Factor	Max.Power Consumption (W)	Color Rendering Index (CRI)
LNR-AL1-1152x15-D28X144-301K	220 VAC	3000K	40	2100	<20%	0,98	19,00	≥80
LNR-AL1-1152x15-D28X144-401K		4000K	40	2100	<20%	0,98	19,00	≥80
LNR-AL1-1152x15-D28X144-651K		6500K	40	2100	<20%	0,98	19,00	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

CIRCULAR LED MODULES

(1)

OSLON SQUARE

- 3000K GW CSSRM3.PM-N3N5-XX57
- 4000K GW CSSRM3.PM-N6N8-XX55
- 6500K GW CSSRM3.PM-N5N7-XX51

Features of LED

- LED type : OSRAM OSLON SQUARE
- LED case : 3.0x3.0 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 1800mA
- Thermal resistance(typ.) : 1.8 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum
- Thicknees : 1.6mm
- Suitable for downlighting
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

(2)

DURIS E2835

- 3000K GW JTLQS1.EM-LWLZ-XX57
- 4000K GW JTLQS1.EM-LXL1-XX55
- 6500K GW JTLQS1.EM-LXL1-XX51

Features of LED

- LED type : OSRAM DURIS E2835
- LED case : 2.8x3.5 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 200mA
- Thermal resistance(typ.) : 11 K/W
- LM80 Test Report

Features of LED MODULE

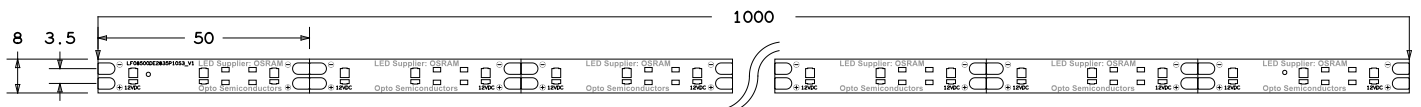
- PCB Material : Cem3
- Thicknees : 1.6mm
- Suitable for downlighting
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty



FLEX LED MODULES



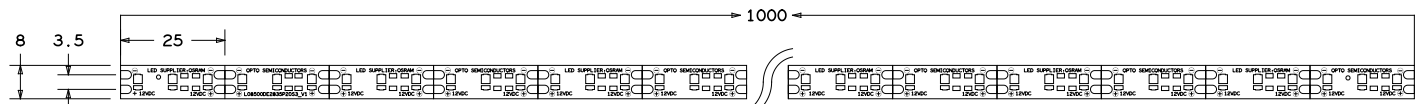
FLX-1000X08-D28X60-V12



Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
FLX-1000x08-D28X60-301K	3000K	60	20	3	558 704	532 671	12	7,00	≥80
FLX-1000x08-D28X60-401K	4000K	60	20	3	558 704	532 671	12	7,00	≥80
FLX-1000x08-D28X60-651K	6500K	60	20	3	558 704	532 671	12	7,00	≥80
FLX-1000x08-D28X60-301K	3000K	60	20	3	1309 1651	1248 1574	12	14,00	≥80
FLX-1000x08-D28X60-401K	4000K	60	20	3	1309 1651	1248 1574	12	14,00	≥80
FLX-1000x08-D28X60-651K	6500K	60	20	3	1309 1651	1248 1574	12	14,00	≥80

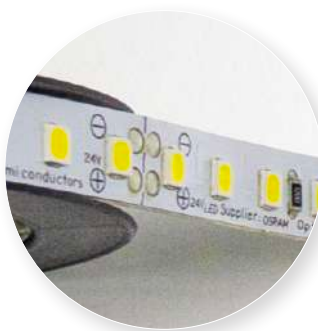
Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

FLX-1000X08-D28X120-V12

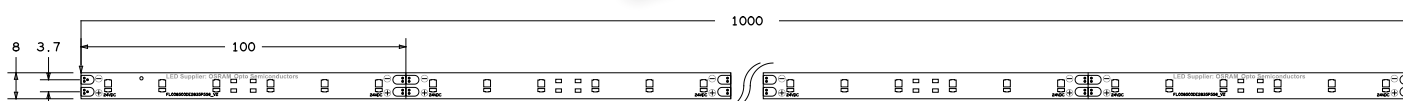


Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
FLX-1000x08-D28X120-301K	3000K	120	40	3	618 779	590 744	12	10,00	≥80
FLX-1000x08-D28X120-401K	4000K	120	40	3	618 779	590 744	12	10,00	≥80
FLX-1000x08-D28X120-651K	6500K	120	40	3	618 779	590 744	12	10,00	≥80
FLX-1000x08-D28X120-301K	3000K	120	40	3	1807 2278	1723 2173	12	20,00	≥80
FLX-1000x08-D28X120-401K	4000K	120	40	3	1807 2278	1723 2173	12	20,00	≥80
FLX-1000x08-D28X120-651K	6500K	120	40	3	1807 2278	1723 2173	12	20,00	≥80

FLEX LED MODULES



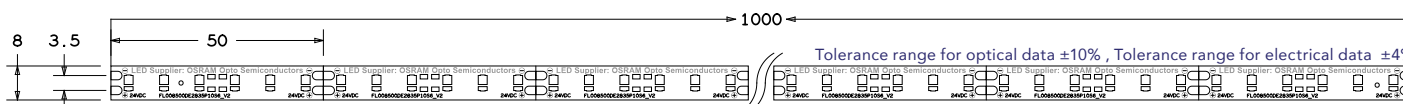
FLX-1000X08-D28X60-V24



Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
FLX-1000x08-D28X60-301K	3000K	60	10	6	558 704	532 671	24	7,00	≥80
FLX-1000x08-D28X60-401K	4000K	60	10	6	558 704	532 671	24	7,00	≥80
FLX-1000x08-D28X60-651K	6500K	60	10	6	558 704	532 671	24	7,00	≥80
FLX-1000x08-D28X60-301K	3000K	60	10	6	1309 1651	1248 1574	24	14,00	≥80
FLX-1000x08-D28X60-401K	4000K	60	10	6	1309 1651	1248 1574	24	14,00	≥80
FLX-1000x08-D28X60-651K	6500K	60	10	6	1309 1651	1248 1574	24	14,00	≥80

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

FLX-1000X08-D28X120-V24



Product Code	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=45 °C (lm)	Forward Voltage (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
FLX-1000x08-D28X120-301K	3000K	120	20	6	618 779	590 744	24	10,00	≥80
FLX-1000x08-D28X120-401K	4000K	120	20	6	618 779	590 744	24	10,00	≥80
FLX-1000x08-D28X120-651K	6500K	120	20	6	618 779	590 744	24	10,00	≥80
FLX-1000x08-D28X120-302K	3000K	120	20	6	1807 2278	1723 2173	24	20,00	≥80
FLX-1000x08-D28X120-402K	4000K	120	20	6	1807 2278	1723 2173	24	20,00	≥80
FLX-1000x08-D28X120-652K	6500K	120	20	6	1807 2278	1723 2173	24	20,00	≥80

DURIS E2835

- 3000K GW JTLMSX.EM-B8A2-30S5
- 4000K GW JTLMSX.EM-B8A2-40S5
- 6500K GW JTLMSX.EM-B8A2-65S5



Features of LED

- LED type : OSRAM DURIS E2835
- LED case : 2.8x3.5 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 90mA
- Thermal resistance(typ.) : 25 K/W
- LM80 Test Report

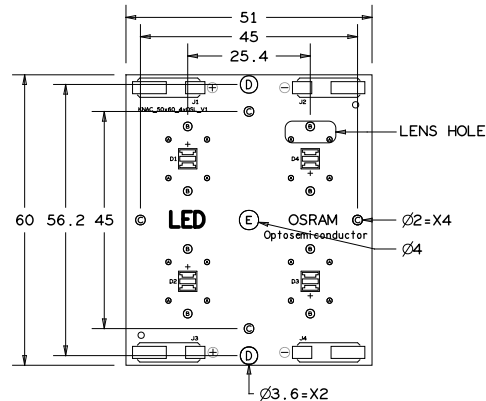
Features of LED MODULE

- PCB Material : FPCB
- Thickness : 0.3mm
- Suitable for linear illumination
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

RECTANGLE LED MODULES

REC-AL1-60X50X1.6-SQRX04 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	1
Darkoo 2x2 50x50mm 90°	1
Khatod NACTUS SMALL 2x2 50x50mm 50°	1
Khatod NACTUS SMALL 2x2 50x50mm 90°	1
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	1
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	1
Housing / Heatsink	
DB-01 / SKL-01	

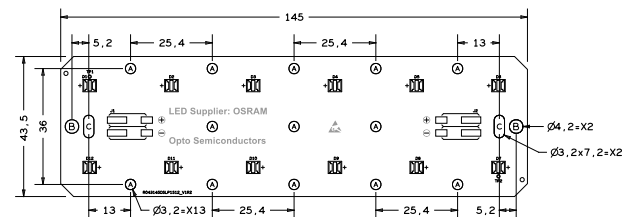


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-60x50-SQRx04-30	350 mA	3000K	4	1	4	642 684	10,64	11,44	4,00	≥70
REC-AL1-60x50-SQRx04-40		4000K	4	1	4	705 747	10,64	11,44	4,00	≥70
REC-AL1-60x50-SQRx04-65		6500K	4	1	4	684 726	10,64	11,44	4,00	≥70
REC-AL1-60x50-SQRx04-30	500 mA	3000K	4	1	4	891 949	10,64	11,44	5,72	≥70
REC-AL1-60x50-SQRx04-40		4000K	4	1	4	978 1037	10,64	11,44	5,72	≥70
REC-AL1-60x50-SQRx04-65		6500K	4	1	4	949 1007	10,64	11,44	5,72	≥70
REC-AL1-60x50-SQRx04-30	700 mA	3000K	4	1	4	1206 1285	10,64	11,44	8,00	≥70
REC-AL1-60x50-SQRx04-40		4000K	4	1	4	1325 1404	10,64	11,44	8,00	≥70
REC-AL1-60x50-SQRx04-65		6500K	4	1	4	1285 1365	10,64	11,44	8,00	≥70
REC-AL1-60x50-SQRx04-30	1050 mA	3000K	4	1	4	1715 1828	10,64	11,44	12,01	≥70
REC-AL1-60x50-SQRx04-40		4000K	4	1	4	1884 1997	10,64	11,44	12,01	≥70
REC-AL1-60x50-SQRx04-65		6500K	4	1	4	1828 1940	10,64	11,44	12,01	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-145X43X1.6-SQRX12 ⁽¹⁾

Lenses	Qty
Khatod SAR1A 2x6 IP Lens 173x72mm 149x95.2° Asymmetrical	1
Khatod NACTUS 2x6 IP Lens 173x72mm 15°	1
Khatod NACTUS 2x6 IP Lens 173x72mm 34°	1
Khatod NACTUS 2x6 IP Lens 173x72mm 60°	1
Khatod NACTUS 2x6 IP Lens 173x72mm 90°	1
Housing / Heatsink	
DB-01 / SKL-01 / SKL-40	



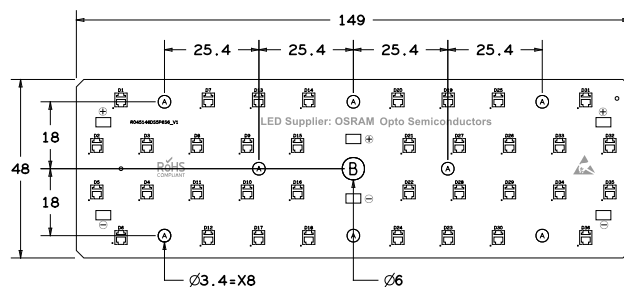
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-145x43-SQRx12-30	350 mA	3000K	12	1	12	1926 2052	31,92	34,32	12,01	≥70
REC-AL1-145x43-SQRx12-40		4000K	12	1	12	2115 2242	31,92	34,32	12,01	≥70
REC-AL1-145x43-SQRx12-65		6500K	12	1	12	2052 2179	31,92	34,32	12,01	≥70
REC-AL1-145x43-SQRx12-30	500 mA	3000K	12	1	12	2672 2848	31,92	34,32	17,16	≥70
REC-AL1-145x43-SQRx12-40		4000K	12	1	12	2935 3110	31,92	34,32	17,16	≥70
REC-AL1-145x43-SQRx12-65		6500K	12	1	12	2848 3023	31,92	34,32	17,16	≥70
REC-AL1-145x43-SQRx12-30	700 mA	3000K	12	1	12	3620 3857	31,92	34,32	24,02	≥70
REC-AL1-145x43-SQRx12-40		4000K	12	1	12	3976 4213	31,92	34,32	24,02	≥70
REC-AL1-145x43-SQRx12-65		6500K	12	1	12	3857 4095	31,92	34,32	24,02	≥70
REC-AL1-145x43-SQRx12-30	1050 mA	3000K	12	1	12	5148 5486	31,92	34,32	36,04	≥70
REC-AL1-145x43-SQRx12-40		4000K	12	1	12	5655 5992	31,92	34,32	36,04	≥70
REC-AL1-145x43-SQRx12-65		6500K	12	1	12	5486 5823	31,92	34,32	36,04	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-149X48X1.6-DS5X36 (2)

Lenses	Qty
Darkoo 36in1 IP Lens 173x72mm 157x90° IESNA Type II Small	1
Housing / Heatsink	
DB-01 / SKL-01 / SKL-40	

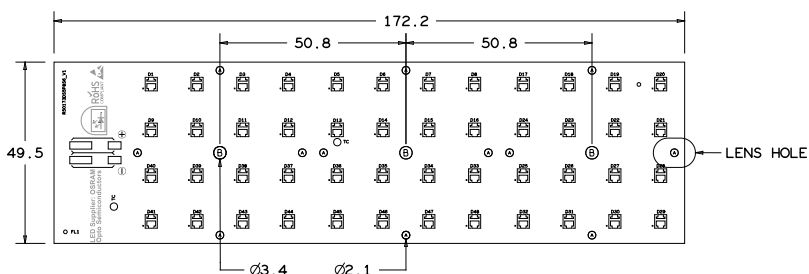


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-149X48-DS5V1x36-30	500 mA	3000K	36	6	6	4082 4359	3821 4081	36,06	37,02	18,51	≥70
REC-AL1-149X48-DS5V1x36-30		4000K	36	6	6	4221 4497	3951 4210	36,06	37,02	18,51	≥70
REC-AL1-149X48-DS5V1x36-30		6500K	36	6	6	4082 4359	3821 4081	36,06	37,02	18,51	≥70
REC-AL1-149X48-DS5V1x36-30	700 mA	3000K	36	6	6	5581 5960	5221 5575	36,06	37,02	25,91	≥70
REC-AL1-149X48-DS5V1x36-30		4000K	36	6	6	5771 6149	5398 5752	36,06	37,02	25,91	≥70
REC-AL1-149X48-DS5V1x36-30		6500K	36	6	6	5581 5960	5221 5575	36,06	37,02	25,91	≥70
REC-AL1-149X48-DS5V1x36-30	1050 mA	3000K	36	6	6	8022 8566	7493 8001	36,06	37,02	38,87	≥70
REC-AL1-149X48-DS5V1x36-30		4000K	36	6	6	8294 8838	7747 8255	36,06	37,02	38,87	≥70
REC-AL1-149X48-DS5V1x36-30		6500K	36	6	6	8022 8566	7493 8001	36,06	37,02	38,87	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-173X50X1.6-DS5X48 (2)

Lenses	Qty
Darkoo 4x4 50x50mm 60°	3
Darkoo 4x4 50x50mm 90°	3
Darkoo 4x4 50x50mm 147x72° IESNA Type II Medium	3
BJB OptiSquare 4x4 50x50mm 90°	3
BJB OptiSquare 4x4 50x50mm IESNA Type II Medium	3
Housing / Heatsink	
DB-01/SKL-01/SKL-40	

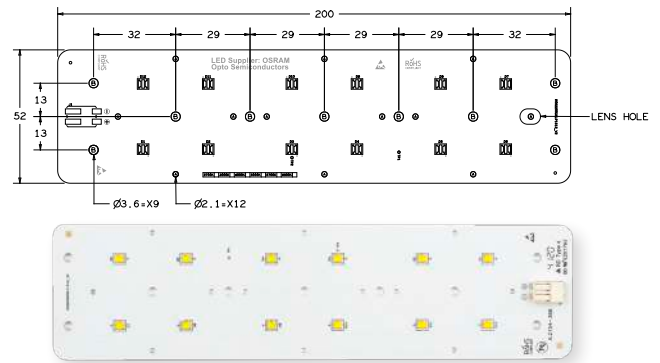


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-173X50-DS5V1x48-30	800 mA	3000K	48	8	6	4060 5189	4548 4855	36,06	37,02	29,62	≥70
REC-AL1-173X50-DS5V1x48-40		4000K	48	8	6	5024 5353	4702 5009	36,06	37,02	29,62	≥70
REC-AL1-173X50-DS5V1x48-65		6500K	48	8	6	4860 5189	4548 4855	36,06	37,02	29,62	≥70
REC-AL1-173X50-DS5V1x48-30	1200 mA	3000K	48	8	6	7030 7505	6571 7015	36,06	37,02	44,43	≥70
REC-AL1-173X50-DS5V1x48-40		4000K	48	8	6	7268 7743	6793 7237	36,06	37,02	44,43	≥70
REC-AL1-173X50-DS5V1x48-65		6500K	48	8	6	7030 7505	6571 7015	36,06	37,02	44,43	≥70
REC-AL1-173X50-DS5V1x48-30	1400 mA	3000K	48	8	6	8049 8593	7518 8020	36,06	37,02	51,83	≥70
REC-AL1-173X50-DS5V1x48-40		4000K	48	8	6	8321 8865	7772 8280	36,06	37,02	51,83	≥70
REC-AL1-173X50-DS5V1x48-65		6500K	48	8	6	8049 8593	7518 8020	36,06	37,02	51,83	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-200X52X1.6-SQRX12 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	3
Darkoo 2x2 50x50mm 90°	3
Khatod NACTUS SMALL 2x2 50x50mm 50°	3
Khatod NACTUS SMALL 2x2 50x50mm 90°	3
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	3
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	3
Housing / Heatsink	
DB-01 / SKL-01	

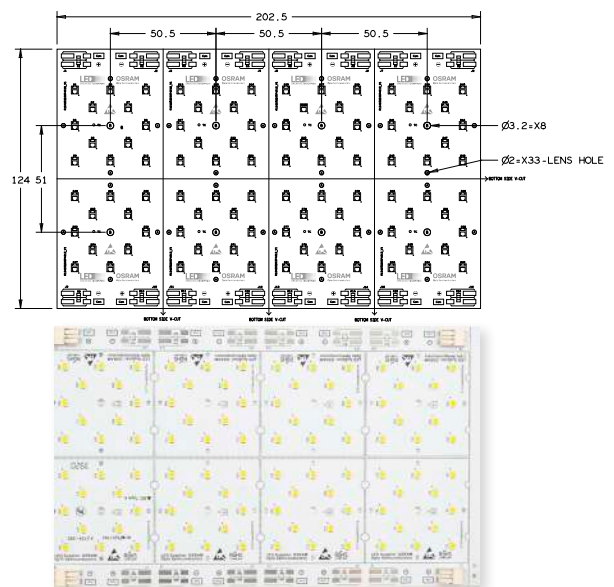


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)		Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-200x52-SQRx12-30	350 mA	3000K	12	1	12	1926	2052	31,92	34,32	12,01	≥70
REC-AL1-200x52-SQRx12-40		4000K	12	1	12	2115	2242	31,92	34,32	12,01	≥70
REC-AL1-200x52-SQRx12-65		6500K	12	1	12	2052	2179	31,92	34,32	12,01	≥70
REC-AL1-200x52-SQRx12-30	500 mA	3000K	12	1	12	2672	2848	31,92	34,32	17,16	≥70
REC-AL1-200x52-SQRx12-40		4000K	12	1	12	2935	3110	31,92	34,32	17,16	≥70
REC-AL1-200x52-SQRx12-65		6500K	12	1	12	2848	3023	31,92	34,32	17,16	≥70
REC-AL1-200x52-SQRx12-30	700 mA	3000K	12	1	12	3620	3857	31,92	34,32	24,02	≥70
REC-AL1-200x52-SQRx12-40		4000K	12	1	12	3976	4213	31,92	34,32	24,02	≥70
REC-AL1-200x52-SQRx12-65		6500K	12	1	12	3857	4095	31,92	34,32	24,02	≥70
REC-AL1-200x52-SQRx12-30	1050 mA	3000K	12	1	12	5148	5486	31,92	34,32	36,04	≥70
REC-AL1-200x52-SQRx12-40		4000K	12	1	12	5655	5992	31,92	34,32	36,04	≥70
REC-AL1-200x52-SQRx12-65		6500K	12	1	12	5486	5823	31,92	34,32	36,04	≥70

Tolerance range for optical data $\pm 10\%$, Tolerance range for electrical data $\pm 4\%$

REC-AL1-202X124X1.6-DS5X96 ⁽²⁾

Lenses	Qty
Darkoo 4x3 50x50mm 30°	8
Darkoo 4x3 50x50mm 60°	8
Darkoo 4x3 50x50mm 90°	8
Darkoo 4x3 50x50mm 150x75° IESNA Type II Small	8
Housing / Heatsink	
PR-18 / SKL-40 / SKL-18	



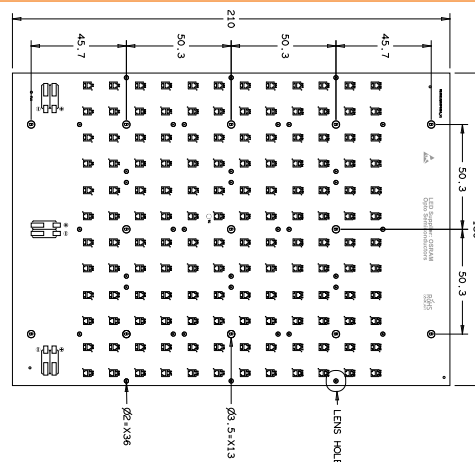
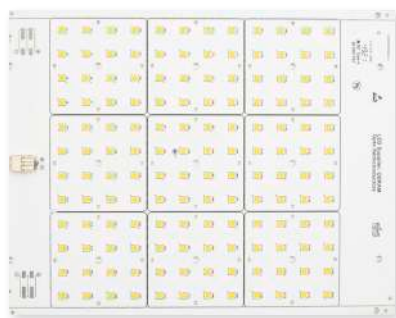
Product Code	Operating Mode	At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)		Luminous Flux @ ts=45 °C (lm)		Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=65 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-202X124-DS5V1x96-30	700 mA		3000K	96	8	12	8851	9131	8004	8547	72,12	74,04	51,83	≥70
REC-AL1-202X124-DS5V1x96-40			4000K	96	8	12	8841	9421	8276	8818	72,12	74,04	51,83	≥70
REC-AL1-202X124-DS5V1x96-65			6500K	96	8	12	8851	9131	8004	8547	72,12	74,04	51,83	≥70
REC-AL1-202X124-DS5V1x96-30	1000 mA		3000K	96	8	12	11894	12701	11124	11878	72,12	74,04	74,04	≥70
REC-AL1-202X124-DS5V1x96-40			4000K	96	8	12	12298	13104	11501	12255	72,12	74,04	74,04	≥70
REC-AL1-202X124-DS5V1x96-65			6500K	96	8	12	11894	12701	1124	11878	72,12	74,04	74,04	≥70
REC-AL1-202X124-DS5V1x96-30	1400 mA		3000K	96	8	12	16044	17131	14986	16002	72,12	74,04	103,66	≥70
REC-AL1-202X124-DS5V1x96-40			4000K	96	8	12	16587	17675	15494	16510	72,12	74,04	103,66	≥70
REC-AL1-202X124-DS5V1x96-65			6500K	96	68	12	16044	17131	14986	16002	72,12	74,04	103,66	≥70

Tolerance range for optical data $\pm 10\%$, Tolerance range for electrical data $\pm 4\%$

RECTANGLE LED MODULES

REC-AL1-210X150X1.6-DS5X144 ⁽²⁾

Lenses	Qty
Darkoo 4x4 50x50mm 60°	9
Darkoo 4x4 50x50mm 90°	9
Darkoo 4x4 50x50mm 147x72° IESNA Type II Medium	9
BJB OptiSquare 4x4 50x50mm 90°	9
BJB OptiSquare 4x4 50x50mm IESNA Type II Medium	9
Housing / Heatsink	
SKL-60 / SKL-18 / PR-18	

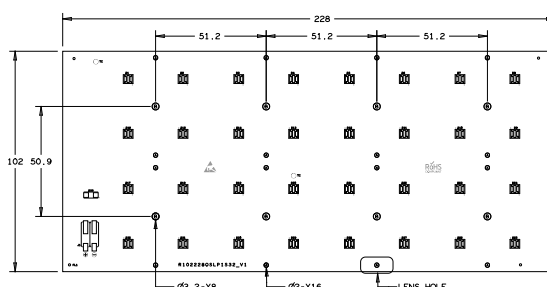


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-210X150-DS5V1x144-30	500 mA	3000K	144	6	24	12247 13077	11464 12242	144,24	148,08	74,04	≥70
REC-AL1-210X150-DS5V1x144-40		4000K	144	6	24	12662 13492	11853 12630	144,24	148,08	74,04	≥70
REC-AL1-210X150-DS5V1x144-65		6500K	144	6	24	12247 13077	11464 12242	144,24	148,08	74,04	≥70
REC-AL1-210X150-DS5V1x144-30	700 mA	3000K	144	6	24	16744 17879	15663 16725	144,24	148,08	103,66	≥70
REC-AL1-210X150-DS5V1x144-40		4000K	144	6	24	17312 18447	16194 17256	144,24	148,08	103,66	≥70
REC-AL1-210X150-DS5V1x144-65		6500K	144	6	24	16744 17879	15663 16725	144,24	148,08	103,66	≥70
REC-AL1-210X150-DS5V1x144-30	1050 mA	3000K	144	6	24	24065 25697	22479 24003	144,24	148,08	155,48	≥70
REC-AL1-210X150-DS5V1x144-40		4000K	144	6	24	24881 26513	23241 24765	144,24	148,08	155,48	≥70
REC-AL1-210X150-DS5V1x144-65		6500K	144	6	24	24065 25697	22479 24003	144,24	148,08	155,48	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-228X102X1.6-SQRX32 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	8
Darkoo 2x2 50x50mm 90°	8
Khatod NACTUS SMALL 2x2 50x50mm 50°	8
Khatod NACTUS SMALL 2x2 50x50mm 90°	8
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	8
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	8
Housing / Heatsink	
PR-18 / SKL-18	



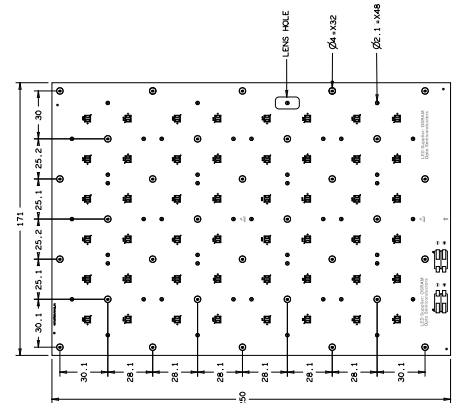
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-228x102-SQRx32-30	350 mA	3000K	32	1	32	5135 5472	85,12	91,52	32,03	≥70
REC-AL1-228x102-SQRx32-40		4000K	32	1	32	5640 5977	85,12	91,52	32,03	≥70
REC-AL1-228x102-SQRx32-65		6500K	32	1	32	5472 5809	85,12	91,52	32,03	≥70
REC-AL1-228x102-SQRx32-30	500 mA	3000K	32	1	32	7125 7592	85,12	91,52	45,76	≥70
REC-AL1-228x102-SQRx32-40		4000K	32	1	32	7826 8293	85,12	91,52	45,76	≥70
REC-AL1-228x102-SQRx32-65		6500K	32	1	32	7592 8059	85,12	91,52	45,76	≥70
REC-AL1-228x102-SQRx32-30	700 mA	3000K	32	1	32	9651 10284	85,12	91,52	64,06	≥70
REC-AL1-228x102-SQRx32-40		4000K	32	1	32	10600 11233	85,12	91,52	64,06	≥70
REC-AL1-228x102-SQRx32-65		6500K	32	1	32	10284 10917	85,12	91,52	64,06	≥70
REC-AL1-228x102-SQRx32-30	1050 mA	3000K	32	1	32	13723 14623	85,12	91,52	96,10	≥70
REC-AL1-228x102-SQRx32-40		4000K	32	1	32	15073 15973	85,12	91,52	96,10	≥70
REC-AL1-228x102-SQRx32-65		6500K	32	1	32	14623 15523	85,12	91,52	96,10	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-250X171X1.6-SQRX48 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	12
Darkoo 2x2 50x50mm 90°	12
Khatod NACTUS SMALL 2x2 50x50mm 50°	12
Khatod NACTUS SMALL 2x2 50x50mm 90°	12
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	12
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	12
Housing / Heatsink	
PR-28 / SKL-28 / PR-79 / SKL-79XP	

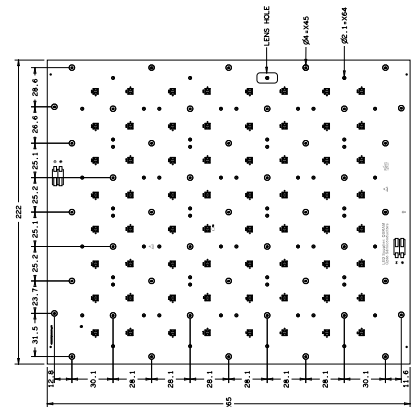
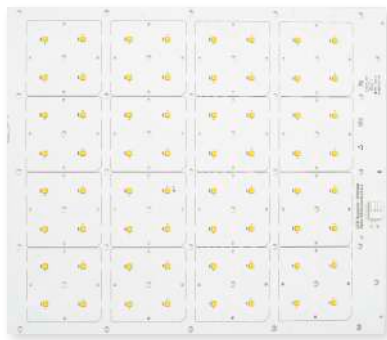


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-250x171-SQRx48-30	350 mA	3000K	48	1	48	7704 8208	127,68	137,28	48,05	≥70
REC-AL1-250x171-SQRx48-40		4000K	48	1	48	8460 8968	127,68	137,28	48,05	≥70
REC-AL1-250x171-SQRx48-65		6500K	48	1	48	8208 8716	127,68	137,28	48,05	≥70
REC-AL1-250x171-SQRx48-30	500 mA	3000K	48	1	48	10688 11392	127,68	137,28	68,64	≥70
REC-AL1-250x171-SQRx48-40		4000K	48	1	48	11740 12440	127,68	137,28	68,64	≥70
REC-AL1-250x171-SQRx48-65		6500K	48	1	48	11392 12092	127,68	137,28	68,64	≥70
REC-AL1-250x171-SQRx48-30	700 mA	3000K	48	1	48	14480 15428	127,68	137,28	96,10	≥70
REC-AL1-250x171-SQRx48-40		4000K	48	1	48	15904 16852	127,68	137,28	96,10	≥70
REC-AL1-250x171-SQRx48-65		6500K	48	1	48	15428 16380	127,68	137,28	96,10	≥70
REC-AL1-250x171-SQRx48-30	1050 mA	3000K	48	1	48	20592 21944	127,68	137,28	144,14	≥70
REC-AL1-250x171-SQRx48-40		4000K	48	1	48	22620 23968	127,68	137,28	144,14	≥70
REC-AL1-250x171-SQRx48-65		6500K	48	1	48	21944 23292	127,68	137,28	144,14	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-265X222X1.6-SQRX64 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	16
Darkoo 2x2 50x50mm 90°	16
Khatod NACTUS SMALL 2x2 50x50mm 50°	16
Khatod NACTUS SMALL 2x2 50x50mm 90°	16
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	16
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	16
Housing / Heatsink	
PR-28 / SKL-28 / PR-79 / SKL-79XP	



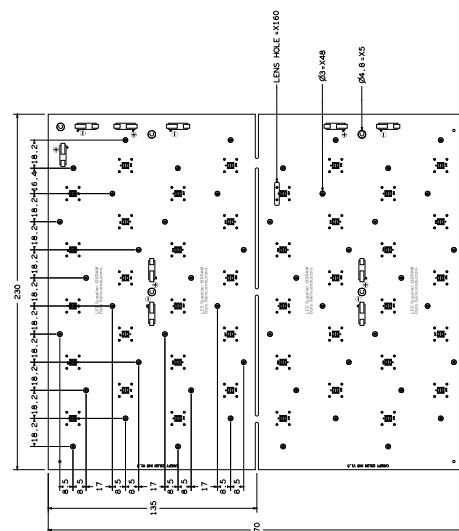
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-265x222-SQRx64-30	350 mA	3000K	64	1	64	10271 10944	170,24	183,04	64,06	≥70
REC-AL1-265x222-SQRx64-40		4000K	64	1	64	11281 11954	170,24	183,04	64,06	≥70
REC-AL1-265x222-SQRx64-65		6500K	64	1	64	10944 11618	170,24	183,04	64,06	≥70
REC-AL1-265x222-SQRx64-30	500 mA	3000K	64	1	64	14250 15184	170,24	183,04	91,52	≥70
REC-AL1-265x222-SQRx64-40		4000K	64	1	64	15651 16586	170,24	183,04	91,52	≥70
REC-AL1-265x222-SQRx64-65		6500K	64	1	64	15184 16119	170,24	183,04	91,52	≥70
REC-AL1-265x222-SQRx64-30	700 mA	3000K	64	1	64	19302 20567	170,24	183,04	128,13	≥70
REC-AL1-265x222-SQRx64-40		4000K	64	1	64	21200 22466	170,24	183,04	128,13	≥70
REC-AL1-265x222-SQRx64-65		6500K	64	1	64	20567 21833	170,24	183,04	128,13	≥70
REC-AL1-265x222-SQRx64-30	1050 mA	3000K	64	1	64	27447 29246	170,24	183,04	192,19	≥70
REC-AL1-265x222-SQRx64-40		4000K	64	1	64	30146 31946	170,24	183,04	192,19	≥70
REC-AL1-265x222-SQRx64-65		6500K	64	1	64	29246 31046	170,24	183,04	192,19	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-270X230X1.6-SQRX40 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	10
Darkoo 2x2 50x50mm 90°	10
Khatod NACTUS SMALL 2x2 50x50mm 50°	10
Khatod NACTUS SMALL 2x2 50x50mm 90°	10
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	10
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	10
Housing / Heatsink	
PR-28 / SKL-28 / PR-79 / SKL-79XP	

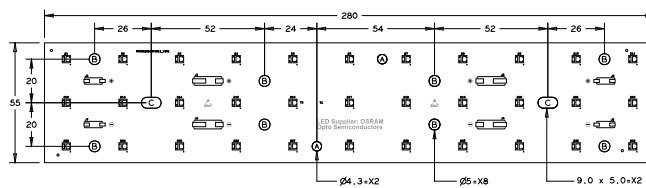


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-270x230-SQRx40-30	350 mA	3000K	40	1	40	6419 6840	106,40	114,40	40,04	≥70
REC-AL1-270x230-SQRx40-40		4000K	40	1	40	7050 7471	106,40	114,40	40,04	≥70
REC-AL1-270x230-SQRx40-65		6500K	40	1	40	6840 7261	106,40	114,40	40,04	≥70
REC-AL1-270x230-SQRx40-30	500 mA	3000K	40	1	40	8906 9490	106,40	114,40	57,20	≥70
REC-AL1-270x230-SQRx40-40		4000K	40	1	40	9782 10366	106,40	114,40	57,20	≥70
REC-AL1-270x230-SQRx40-65		6500K	40	1	40	9490 10074	106,40	114,40	57,20	≥70
REC-AL1-270x230-SQRx40-30	700 mA	3000K	40	1	40	12064 12855	106,40	114,40	80,08	≥70
REC-AL1-270x230-SQRx40-40		4000K	40	1	40	13250 14041	106,40	114,40	80,08	≥70
REC-AL1-270x230-SQRx40-65		6500K	40	1	40	12855 13646	106,40	114,40	80,08	≥70
REC-AL1-270x230-SQRx40-30	1050 mA	3000K	40	1	40	17154 18279	106,40	114,40	120,12	≥70
REC-AL1-270x230-SQRx40-40		4000K	40	1	40	18841 19966	106,40	114,40	120,12	≥70
REC-AL1-270x230-SQRx40-65		6500K	40	1	40	18279 19404	106,40	114,40	120,12	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-280X55X1.6-DS5X33 ⁽²⁾

Lenses	Qty
KHTD Stock&Shop 3x11 286x60mm 30°	1
KHTD Stock&Shop 3x11 286x60mm 60°	1
KHTD Stock&Shop 3x11 286x60mm 90°	1
KHTD Stock&Shop 3x11 286x60mm 90° Double Asymmetrical	1
Housing / Heatsink	
ETJ-62	



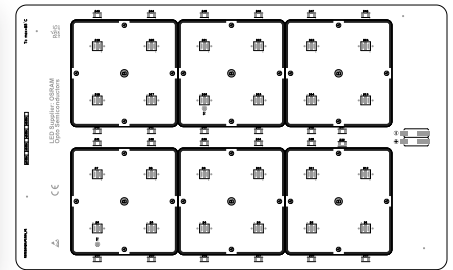
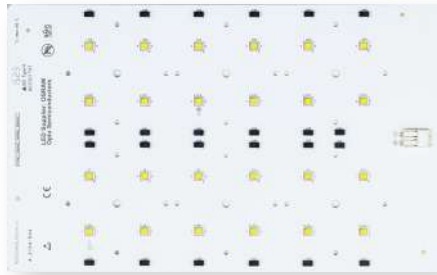
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=25 °C (lm)	Luminous Flux @ ts=65 °C (lm)	Min.Forward Voltage @ts=65 °C (lm)	Max.Forward Voltage @ts=25 °C (lm)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-280X55-DS5V1x33-30	350 mA	3000K	33	3	11	3837 4097	3589 3833	66,11	67,87	23,75	≥70
REC-AL1-280X55-DS5V1x33-40		4000K	33	3	11	3967 4227	3711 3954	66,11	67,87	23,75	≥70
REC-AL1-280X55-DS5V1x33-65		6500K	33	3	11	3837 4097	3589 3833	66,11	67,87	23,75	≥70
REC-AL1-280X55-DS5V1x33-30	50 0 mA	3000K	33	3	11	5284 5642	4937 5271	66,11	67,87	33,94	≥70
REC-AL1-280X55-DS5V1x33-40		4000K	33	3	11	5463 5821	5104 5439	66,11	67,87	33,94	≥70
REC-AL1-280X55-DS5V1x33-65		6500K	33	3	11	5284 5642	4937 5271	66,11	67,87	33,94	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-202X124X1.6-SQRX24 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	6
Darkoo 2x2 50x50mm 90°	6
Khatod NACTUS SMALL 2x2 50x50mm 50°	6
Khatod NACTUS SMALL 2x2 50x50mm 90°	6
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	6
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	6
Housing / Heatsink	
SKL-40(40W)	

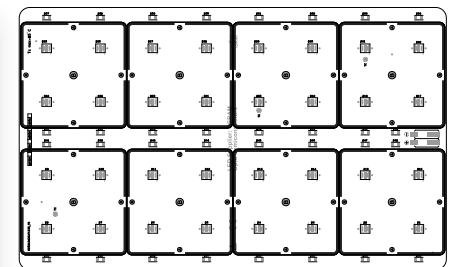
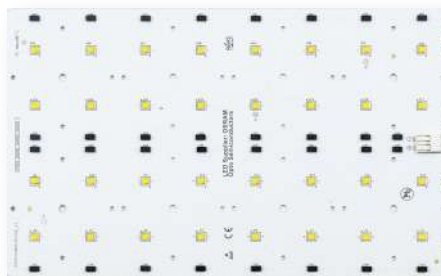


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-202x124-SQRx24-30	350 mA	3000K	24	1	24	3851 4104	63,84	68,64	24,02	≥70
REC-AL1-202x124-SQRx24-40		4000K	24	1	24	4230 4483	63,84	68,64	24,02	≥70
REC-AL1-202x124-SQRx24-65		6500K	24	1	24	4104 4357	63,84	68,64	24,02	≥70
REC-AL1-202x124-SQRx24-30	500 mA	3000K	24	1	24	5344 5694	63,84	68,64	34,32	≥70
REC-AL1-202x124-SQRx24-40		4000K	24	1	24	5869 6220	63,84	68,64	34,32	≥70
REC-AL1-202x124-SQRx24-65		6500K	24	1	24	5694 6044	63,84	68,64	34,32	≥70
REC-AL1-202x124-SQRx24-30	700 mA	3000K	24	1	24	7238 7713	63,84	68,64	48,04	≥70
REC-AL1-202x124-SQRx24-40		4000K	24	1	24	7950 8425	63,84	68,64	48,04	≥70
REC-AL1-202x124-SQRx24-65		6500K	24	1	24	7713 8187	63,84	68,64	48,04	≥70
REC-AL1-202x124-SQRx24-30	1050 mA	3000K	24	1	24	10292 10967	63,84	68,64	72,07	≥70
REC-AL1-202x124-SQRx24-40		4000K	24	1	24	11305 11980	63,84	68,64	72,07	≥70
REC-AL1-202x124-SQRx24-65		6500K	24	1	24	10967 11642	63,84	68,64	72,07	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-202X124X1.6-SQRX32 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	8
Darkoo 2x2 50x50mm 90°	8
Khatod NACTUS SMALL 2x2 50x50mm 50°	8
Khatod NACTUS SMALL 2x2 50x50mm 90°	8
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	8
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	8
Housing / Heatsink	
SKL-40 (60W)	



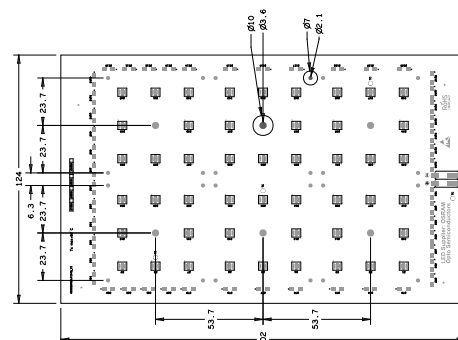
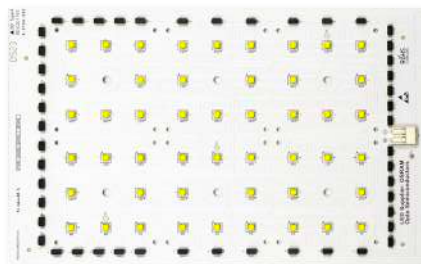
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-202x124-SQRx32-30	350 mA	3000K	32	1	32	5135 5472	85,12	91,52	32,03	≥70
REC-AL1-202x124-SQRx32-40		4000K	32	1	32	5640 5977	85,12	91,52	32,03	≥70
REC-AL1-202x124-SQRx32-65		6500K	32	1	32	5472 5809	85,12	91,52	32,03	≥70
REC-AL1-202x124-SQRx32-30	500 mA	3000K	32	1	32	7125 7592	85,12	91,52	45,76	≥70
REC-AL1-202x124-SQRx32-40		4000K	32	1	32	7826 8293	85,12	91,52	45,76	≥70
REC-AL1-202x124-SQRx32-65		6500K	32	1	32	7592 8059	85,12	91,52	45,76	≥70
REC-AL1-202x124-SQRx32-30	700 mA	3000K	32	1	32	9651 10284	85,12	91,52	64,06	≥70
REC-AL1-202x124-SQRx32-40		4000K	32	1	32	10600 11233	85,12	91,52	64,06	≥70
REC-AL1-202x124-SQRx32-65		6500K	32	1	32	10284 10917	85,12	91,52	64,06	≥70
REC-AL1-202x124-SQRx32-30	1050 mA	3000K	32	1	32	13723 14623	85,12	91,52	96,10	≥70
REC-AL1-202x124-SQRx32-40		4000K	32	1	32	15073 15973	85,12	91,52	96,10	≥70
REC-AL1-202x124-SQRx32-65		6500K	32	1	32	14623 15523	85,12	91,52	96,10	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-202X124X1.6-SQRX48 ⁽¹⁾

Lenses	Qty
Khatod NACTUS SMALL 8in1 50x50mm 132°x167° IESNA Type III Medium	6
Khatod NACTUS SMALL 8in1 50x50mm 108x151° IESNA Type III Medium CutOff	6
Housing / Heatsink	
SKL-60(100W)	

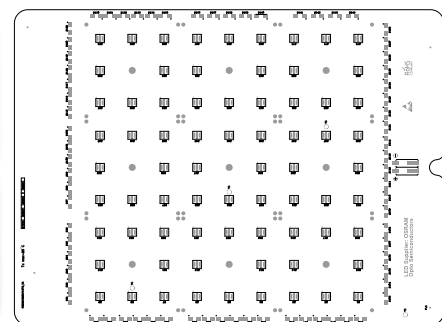
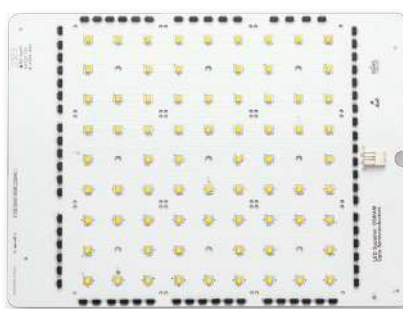


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-202x124-SQRx48-30	350 mA	3000K	48	1	48	7704 8208	127,68	137,28	48,05	≥70
REC-AL1-202x124-SQRx48-40		4000K	48	1	48	8460 8968	127,68	137,28	48,05	≥70
REC-AL1-202x124-SQRx48-65		6500K	48	1	48	8208 8716	127,68	137,28	48,05	≥70
REC-AL1-202x124-SQRx48-30	500 mA	3000K	48	1	48	10688 11392	127,68	137,28	68,64	≥70
REC-AL1-202x124-SQRx48-40		4000K	48	1	48	11740 12440	127,68	137,28	68,64	≥70
REC-AL1-202x124-SQRx48-65		6500K	48	1	48	11392 12092	127,68	137,28	68,64	≥70
REC-AL1-202x124-SQRx48-30	700 mA	3000K	48	1	48	14480 15428	127,68	137,28	96,10	≥70
REC-AL1-202x124-SQRx48-40		4000K	48	1	48	15904 16852	127,68	137,28	96,10	≥70
REC-AL1-202x124-SQRx48-65		6500K	48	1	48	15428 16380	127,68	137,28	96,10	≥70
REC-AL1-202x124-SQRx48-30	1050 mA	3000K	48	1	48	20592 21944	127,68	137,28	144,14	≥70
REC-AL1-202x124-SQRx48-40		4000K	48	1	48	22620 23968	127,68	137,28	144,14	≥70
REC-AL1-202x124-SQRx48-65		6500K	48	1	48	21944 23292	127,68	137,28	144,14	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-222X163X1.6-SQRX72 ⁽¹⁾

Lenses	Qty
Khatod NACTUS SMALL 8in1 50x50mm 132°x167° IESNA Type III Medium	9
Khatod NACTUS SMALL 8in1 50x50mm 108x151° IESNA Type III Medium CutOff	9
Housing / Heatsink	
SKL-60(150W)	



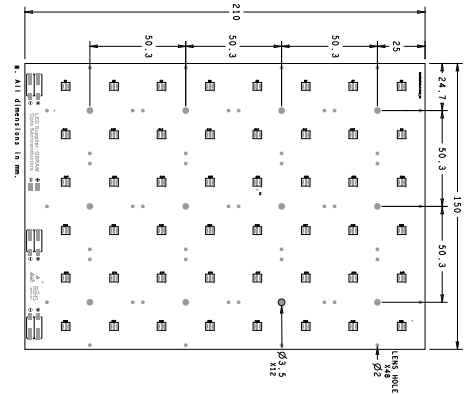
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-222X163X1.6-SQRX72-30	350 mA	3000K	72	1	72	11554 12312	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	12691 13449	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	12312 13070	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-30	500 mA	3000K	72	1	72	16031 17082	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	17608 18659	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	17082 18133	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-30	700 mA	3000K	72	1	72	21714 23138	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	23850 25274	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	23138 24562	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-30	1050 mA	3000K	72	1	72	30877 32902	191,52	205,92	216,21	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	33915 35939	191,52	205,92	216,21	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	32902 34927	191,52	205,92	216,21	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-210X150X1.6-SQRX48 ⁽¹⁾

Lenses	Qty
Darkoo 2x2 50x50mm 60°	12
Darkoo 2x2 50x50mm 90°	12
Khatod NACTUS SMALL 2x2 50x50mm 50°	12
Khatod NACTUS SMALL 2x2 50x50mm 90°	12
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	12
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	12
Housing / Heatsink	
SKL-60 / SKL-18 / PR-18	

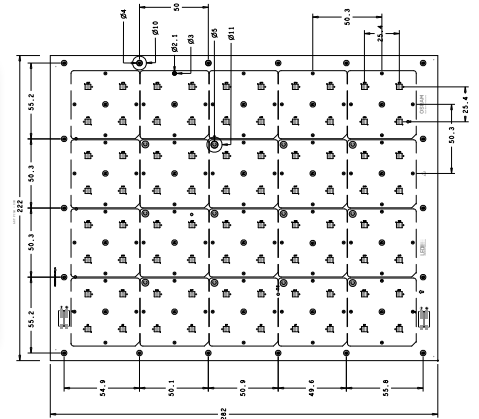


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-210x150-SQRx48-30	350 mA	3000K	48	1	48	7704 8208	127,68	137,28	48,05	≥70
REC-AL1-210x150-SQRx48-40		4000K	48	1	48	8460 8968	127,68	137,28	48,05	≥70
REC-AL1-210x150-SQRx48-65		6500K	48	1	48	8208 8716	127,68	137,28	48,05	≥70
REC-AL1-210x150-SQRx48-30	500 mA	3000K	48	1	48	10688 11392	127,68	137,28	68,64	≥70
REC-AL1-210x150-SQRx48-40		4000K	48	1	48	11740 12440	127,68	137,28	68,64	≥70
REC-AL1-210x150-SQRx48-65		6500K	48	1	48	11392 12092	127,68	137,28	68,64	≥70
REC-AL1-210x150-SQRx48-30	700 mA	3000K	48	1	48	14480 15428	127,68	137,28	96,10	≥70
REC-AL1-210x150-SQRx48-40		4000K	48	1	48	15904 16852	127,68	137,28	96,10	≥70
REC-AL1-210x150-SQRx48-65		6500K	48	1	48	15428 16380	127,68	137,28	96,10	≥70
REC-AL1-210x150-SQRx48-30	1050 mA	3000K	48	1	48	20592 21944	127,68	137,28	144,14	≥70
REC-AL1-210x150-SQRx48-40		4000K	48	1	48	22620 23968	127,68	137,28	144,14	≥70
REC-AL1-210x150-SQRx48-65		6500K	48	1	48	21944 23292	127,68	137,28	144,14	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-282X222X1.6-SQRX80

Lenses	Qty
Darkoo 2x2 50x50mm 60°	20
Darkoo 2x2 50x50mm 90°	20
Khatod NACTUS SMALL 2x2 50x50mm 50°	20
Khatod NACTUS SMALL 2x2 50x50mm 90°	20
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	20
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	20
Housing / Heatsink	
PR-28 / SKL-28 / PR-79 / SKL-79XP	



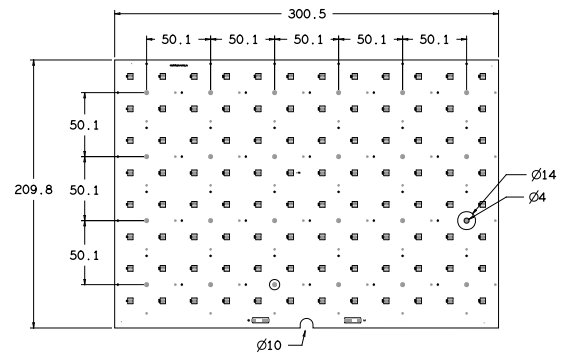
Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-282X222X1.6-SQRX80-30	350 mA	3000K	80	1	80	12838 13680	212,80	228,80	80,00	≥70
REC-AL1-282X222X1.6-SQRX80-40		4000K	80	1	80	14101 14943	212,80	228,80	80,00	≥70
REC-AL1-282X222X1.6-SQRX80-65		6500K	80	1	80	13680 14522	14522	228,80	80,00	≥70
REC-AL1-282X222X1.6-SQRX80-30	500 mA	3000K	80	1	80	17812 18980	212,80	228,80	114,40	≥70
REC-AL1-282X222X1.6-SQRX80-40		4000K	80	1	80	19564 20732	212,80	228,80	114,40	≥70
REC-AL1-282X222X1.6-SQRX80-65		6500K	80	1	80	18980 20148	212,80	228,80	114,40	≥70
REC-AL1-282X222X1.6-SQRX80-30	700 mA	3000K	80	1	80	24127 25709	212,80	228,80	160,16	≥70
REC-AL1-282X222X1.6-SQRX80-40		4000K	80	1	80	26500 28083	212,80	228,80	160,16	≥70
REC-AL1-282X222X1.6-SQRX80-65		6500K	80	1	80	25709 27291	27291	228,80	160,16	≥70
REC-AL1-282X222X1.6-SQRX80-30	1050 mA	3000K	80	1	80	34308 36558	212,80	228,80	240,24	≥70
REC-AL1-282X222X1.6-SQRX80-40		4000K	80	1	80	37683 39933	212,80	228,80	240,24	≥70
REC-AL1-282X222X1.6-SQRX80-65		6500K	80	1	80	36558 38808	212,80	228,80	240,24	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

REC-AL1-301X210X1.6-SQRX96

Lenses	Qty
Darkoo 2x2 50x50mm 60°	24
Darkoo 2x2 50x50mm 90°	24
Khatod NACTUS SMALL 2x2 50x50mm 50°	24
Khatod NACTUS SMALL 2x2 50x50mm 90°	24
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	24
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	24
Housing / Heatsink	
PR-28 / SKL-28 / PR-79 / SKL-79XP	

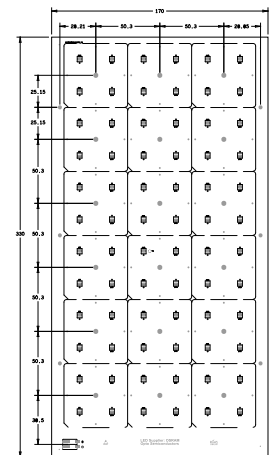


Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-301X210X1.6-SQRX96-30	350 mA	3000K	96	1	96	15406 16416	255,36	274,56	96,09	≥70
REC-AL1-301X210X1.6-SQRX96-40		4000K	96	1	96	16921 17931	255,36	274,56	96,09	≥70
REC-AL1-301X210X1.6-SQRX96-65		6500K	96	1	96	16416 17426	255,36	274,56	96,09	≥70
REC-AL1-301X210X1.6-SQRX96-30	500 mA	3000K	96	1	96	21375 22776	255,36	274,56	137,28	≥70
REC-AL1-301X210X1.6-SQRX96-40		4000K	96	1	96	23477 24879	255,36	274,56	137,28	≥70
REC-AL1-301X210X1.6-SQRX96-65		6500K	96	1	96	22776 24178	255,36	274,56	137,28	≥70
REC-AL1-301X210X1.6-SQRX96-30	700 mA	3000K	96	1	96	28953 30851	255,36	274,56	192,19	≥70
REC-AL1-301X210X1.6-SQRX96-40		4000K	96	1	96	31800 33699	255,36	274,56	192,19	≥70
REC-AL1-301X210X1.6-SQRX96-65		6500K	96	1	96	30851 32750	255,36	274,56	192,19	≥70
REC-AL1-301X210X1.6-SQRX96-30	1050 mA	3000K	96	1	96	41170 43870	255,36	274,56	288,28	≥70
REC-AL1-301X210X1.6-SQRX96-40		4000K	96	1	96	45219 47919	255,36	274,56	288,28	≥70
REC-AL1-301X210X1.6-SQRX96-65		6500K	96	1	96	43870 46569	255,36	274,56	288,28	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

REC-AL1-330X170X1.6-SQRX72

Lenses	Qty
Darkoo 2x2 50x50mm 60°	18
Darkoo 2x2 50x50mm 90°	18
Khatod NACTUS SMALL 2x2 50x50mm 50°	18
Khatod NACTUS SMALL 2x2 50x50mm 90°	18
Khatod NACTUS SMALL 2x2 50x50mm 150x160° IESNA Type II/III	18
Khatod NACTUS SMALL 2x2 50x50mm 160x110° IESNA Type II Medium, ME3A	18
Housing / Heatsink	
PR-18 / SKL-18	



Product Code	Operating Mode At	Color Temp. CCT	Total Number of LEDs	Number of Parallel String	Number of LEDs Per String	Luminous Flux @ ts=85 °C (lm)	Min.Forward Voltage @ts=85 °C (V)	Max.Forward Voltage @ts=85 °C (V)	Max.Power Consumption (W)	Color Rendering Index (CRI)
REC-AL1-222X163X1.6-SQRX72-30	350 mA	3000K	72	1	72	11554 12312	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	12691 13449	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	12312 13070	191,52	205,92	72,07	≥70
REC-AL1-222X163X1.6-SQRX72-30	500 mA	3000K	72	1	72	16031 17082	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	17608 18659	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	17082 18133	191,52	205,92	102,96	≥70
REC-AL1-222X163X1.6-SQRX72-30	700 mA	3000K	72	1	72	21714 23138	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	23850 25274	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	23138 24562	191,52	205,92	144,14	≥70
REC-AL1-222X163X1.6-SQRX72-30	1050 mA	3000K	72	1	72	30877 32902	191,52	205,92	216,21	≥70
REC-AL1-222X163X1.6-SQRX72-40		4000K	72	1	72	33915 35939	191,52	205,92	216,21	≥70
REC-AL1-222X163X1.6-SQRX72-65		6500K	72	1	72	32902 34927	191,52	205,92	216,21	≥70

Tolerance range for optical data ±10% , Tolerance range for electrical data ±4%

RECTANGLE LED MODULES

(1)

OSLON SQUARE

- 3000K GW CSSRM3.PM-N3N5-XX57
- 4000K GW CSSRM3.PM-N6N8-XX55
- 6500K GW CSSRM3.PM-N5N7-XX51

Features of LED

- LED type : OSRAM OSLON SQUARE
- LED case : 3.0x3.0 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 1800mA
- Thermal resistance(typ.) : 1.8 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum
- Thickness : 1.6mm
- Suitable for park, garden, station, street & tunnel
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

(2)

DURIS S5V1

- 3000K GW PSLT33.PM-LYL1-XX57
- 4000K GW PSLT33.PM-LZL2-XX55
- 6500K GW PSLT33.PM-LYL1-XX51

Features of LED

- LED type : OSRAM Duris S5 V1
- LED case : 3.0x3.0 mm
- Viewing angle : 120°
- IEC62471 Biological Eye Safety Test Report
- Up to 200mA
- Voltage : 6.2V
- Thermal resistance(typ.) : 8.9 K/W
- LM80 Test Report

Features of LED MODULE

- PCB Material : Aluminum
- Thickness : 1.6mm
- Suitable for park, garden, station, street & tunnel
- Low energy consumption, high efficacy and long life
- Integrated current source to stabilize
- Homogeneous illumination
- 3 years warranty

LED Modules

Led Lighting

LED DRIVER

We reserve the right to change dimensions.



SARNEKS LED DRIVER

SAR-60-700 CC

- AC input 90 ~ 264VAC
- Built-in active PFC function
- Efficiency: 88%
- Protections : short circuit/over-heat
- Fixed output.
- Suitable for LED lighting applications.
- Cooling by free air convection.
- IP65 design, input/output are connected by cable or coupler.
- Can be applied to dry/wet in the rain, indoor and outdoor
- Compliance to worldwide safety regulations for lighting.
- 3 years warranty



SPECIFICATION							
Input	Voltage range	Rated voltage:100-240VAC, Input voltage range:90~264VAC		Output	Channel	1 Channel	
	Frequency range	47~63Hz			Output Current	700 mA	
	Power factor	PF≥0,9/240VAC; PF≥0,95 / 100VAC (100% full load)			Output Voltage	50 - 85 V	
	Efficiency(Typ.)	700 mA	Test condition:Input voltage 240VAC, 100% full load		Output Current Range	±5%	
		88%			Output Ripple Current	≤30%Io (100%full load)	
	AC current(A)	≤0.8 A/100VAC (100% full load)			Output Overshot/ Undershoot Current	≤10%, when power open and shut down	
	Insush current (Typ.)	Cold start: 50A/240VAC			Start Up Time	0-2S, 100VAC	
	Leakage current	<1mA/240VAC				0-1S, 240VAC	
Environment	Working TEMP	-40~+50°C (100% full load)			Short Circuit Protection	Products is without damage, when abnormal condition removed, re-power on to recover	
	Working Humidity	20~95%RH, non-condensing		Life	Life Time	Long service life: 50.000 hours	
	Storage TEMP&humidity	-40~+80°C, 10~95%RH		Size	L*W*H	163*43*32mm	
	Temp. Coefficient	±0,03%/°C (0~50°C)					
	Vibration	10~100Hz. 5G 12min/1cycle, period for 72 min. each along X, Y, Z axes					

SAR-60-1050 CC

- AC input 90 ~ 264VAC
- Built-in active PFC function
- Efficiency: 90%
- Protections : short circuit/over-heat
- Fixed output.
- Suitable for LED lighting applications.
- Cooling by free air convection.
- IP65 design, input/output are connected by cable or coupler.
- Can be applied to dry/wet in the rain, indoor and outdoor
- Compliance to worldwide safety regulations for lighting.
- 3 years warranty



SPECIFICATION							
Input	Voltage range	Rated voltage:100-240VAC, Input voltage range:90~264VAC		Output	Channel	1 Channel	
	Frequency range	47~63Hz			Output Current	1050 mA	
	Power factor	PF≥0,9/240VAC; PF≥0,95 / 100VAC (100% full load)			Output Voltage	34 - 57 V	
	Efficiency(Typ.)	1050 mA	Test condition:Input voltage 240VAC, 100% full load		Output Current Range	±5%	
		90%			Output Ripple Current	≤30%Io (100%full load)	
	AC current(A)	≤0.72 A/100VAC (100% full load)			Output Overshot/ Undershoot Current	≤10%, when power open and shut down	
	Insush current (Typ.)	Cold start: 50A/240VAC			Start Up Time	0-2S, 100VAC	
	Leakage current	<1mA/240VAC				0-1S, 240VAC	
Environment	Working TEMP	-40~+50°C (100% full load)		Short Circuit Protection	Products is without damage, when abnormal condition removed, re-power on to recover		
	Working Humidity	20~95%RH, non-condensing		Life	Life Time	Long service life: 50.000 hours	
	Storage TEMP&humidity	-40~+80°C, 10~95%RH		Size	L*W*H	163*43*32mm	
	Temp. Coefficient	±0,03%/°C (0~50°C)					
	Vibration	10~100Hz. 5G 12min/1cycle, period for 72 min. each along X, Y, Z axes					

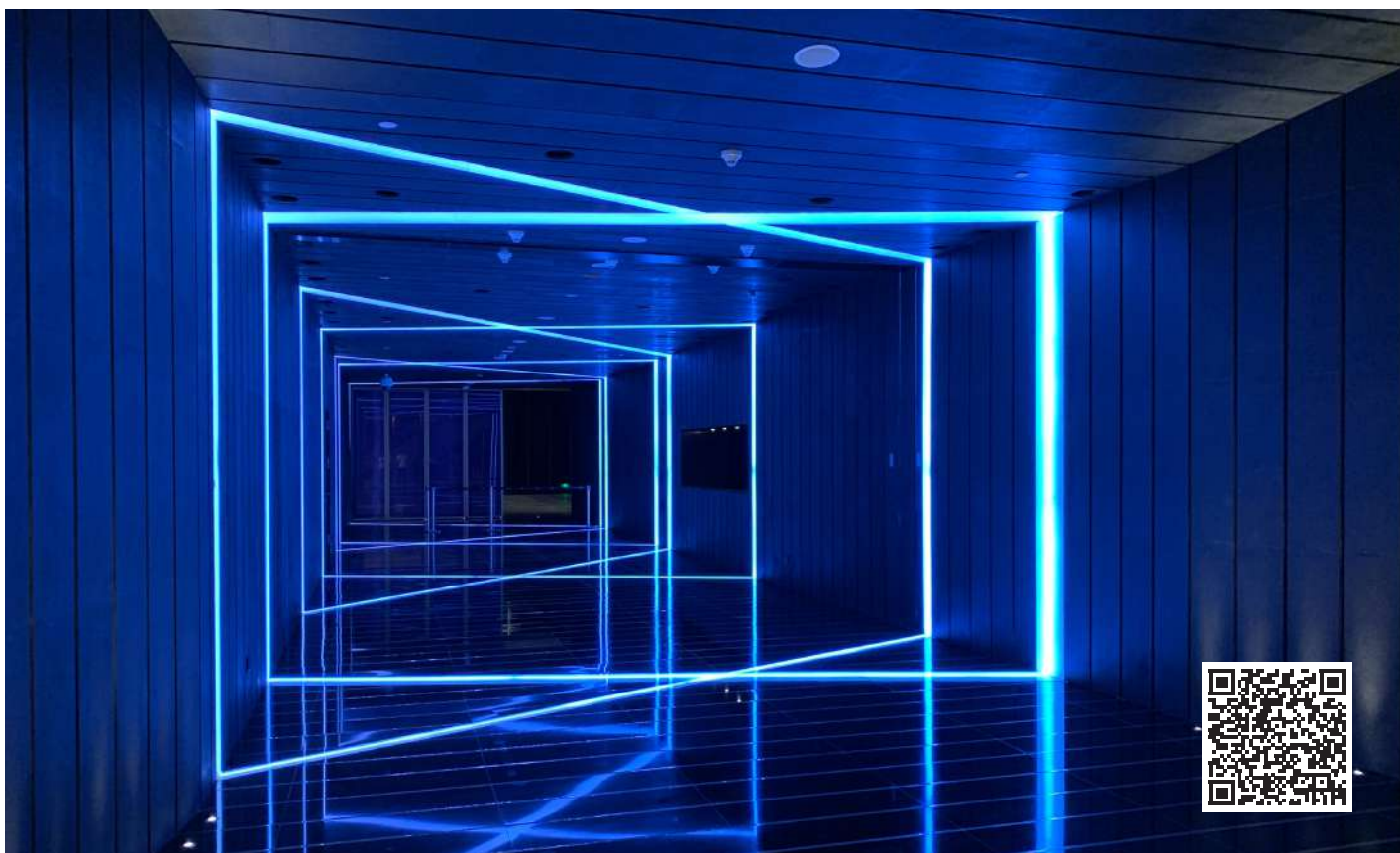
SARNEKS LED DRIVER

SAR-60-1400 CC

- AC input: 90-265VAC
- Built-in active PFC function
- Efficiency: 90%
- Protections: short circuit/over-heat
- Cooling by free air convection
- IP65 design, input/output are connected by cable or coupler
- Fixed output/power switch or dimming function
(power switch mode can be set according to customer's requirements)
- Suitable for LED lighting applications
- Compliance to worldwide safety regulations for lighting
- Can be applied to dry/wet in the rain, indoor outdoor
- 3 years warranty



SPECIFICATION						
Input	Voltage range	Rated voltage:100-240VAC, Input voltage range:90~264VAC		Output	Channel	1 Channel
	Frequency range	47~63Hz			Output Current	1400 mA
	Power factor	PF≥0,9/240VAC; PF≥0,95 / 100VAC (100% full load)			Output Voltage	26-45 V
	Efficiency(Typ.)	1400 mA	Test condition:Input voltage 240VAC, 100% full load		Output Current Range	±5%
		90%			Output Ripple Current	≤30%Io (100%full load)
	AC current(A)	≤0.75 A/100VAC (100% full load)			Output Overshot/ Undershoot Current	≤10%, when power open and shut down
	Insush current (Typ.)	Cold start: 50A/240VAC			Start Up Time	0-2S, 100VAC
	Leakage current	<1mA/240VAC				0-1S, 240VAC
Environment	Working TEMP	-40~+50°C (100% full load)			Short Circuit Protection	Products is without damage, when abnormal condition removed, re-power on to recover
	Working Humidity	20~95%RH, non-condensing		Life	Life Time	Long service life: 50.000 hours
	Storage TEMP&humidity	-40~+80°C, 10~95%RH		Size	L*W*H	163*43*32mm
	Temp. Coefficient	±0,03%/°C (0~50°C)				
	Vibration	10~100Hz. 5G 12min/1cycle, period for 72 min. each along X, Y, Z axes				



OSRAM LED DRIVER

Linear Element G2 EM FIT Family

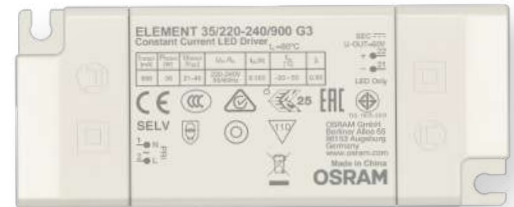
- Constant Current Indoor Lighting LED Driver
- High Efficiency %88-92, PFC>0,95, THD<%20
- Flicker-Free
- Flexible current setting (DIPswitch – 4 currents)
- Enhanced safety due to overload, overtemperature, short-circuit protection
- Small housing for flexible luminaire designs
- Suitable with Class I Luminaire
- 50.000 Hours Lifetime
- IP20



Part Number	SELV	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
EM FIT 18/220-240/350 D CS L	Non-SELV	5..18,9	198..264V	27..54V	200-250-300-350	210*30*21mm
EM FIT 40/220-240/350 D CS L	Non-SELV	8..42	198..264V	40..120V	200-250-300-350	210*30*21mm
EM FIT 60/220-240/350 D CS L	Non-SELV	18..61,25	198..264V	90..175V	200-250-300-350	210*30*21mm
EM FIT 75/220-240/550 D CS L	Non-SELV	31,5..75,6	198..264V	90..216V	350-400-500-550	210*30*21mm
EM FIT 18/220-240/350 CS L	SELV	5,4..17,85	198..264V	27..51V	200-250-300-350	210*30*21mm
EM FIT 40/220-240/800 CS L	SELV	13,5..40,8	198..264V	27..51V	500-600-700-800	210*30*21mm
EM FIT 60/220-240/1A2 CS L	SELV	24,3..61,2	198..264V	27..51V	900-1050-1100-1200	280*30*21mm
EM FIT 75/220-240/1A6 CS L	SELV	35,1..81,6	198..264V	27..51V	1300-1400-1500-1600	280*30*21mm

Compact Element G3 Family

- Constant Current Indoor Lighting LED Driver
- High Efficiency %85-90, PFC>0,98, THD<%10-20
- Flicker-Free
- Protection: High Temperature, High Input Voltage, Low/High Output Voltage, Overload, Zero load, Short Circuit Protection
- Suitable with Class II Luminaire
- 50.000 Hours Lifetime
- IP20- CE, ENEC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
ELEMENT 6/220-240/150 G3	3,6..6,3	198..264	24..42	150	90*43*22mm
ELEMENT 8/220-240/200 G3	4,8..8,4	198..264	24..42	200	90*43*22mm
ELEMENT 10/220-240/250 G3	6..10,5	198..264	24..42	250	90*43*22mm
ELEMENT 12/220-240/300 G3	7,2..12,6	198..264	24..42	300	90*43*22mm
ELEMENT 15/220-240/350 G3	8,4..14,7	198..264	24..42	350	90*43*22mm
ELEMENT 20/220-240/500 G3	10,5..20	198..264	21..40	500	103*43*29mm
ELEMENT 25/220-240/600 G3	12,6..24	198..264	21..40	600	103*43*29mm
ELEMENT 28/220-240/700 G3	14,7..28	198..264	21..40	700	103*43*29mm
ELEMENT 33/220-240/800 G3	16,8..32	198..264	21..40	800	103*43*29mm
ELEMENT 35/220-240/900 G3	18,9..36	198..264	21..40	900	103*43*29mm
ELEMENT 38/220-240/950 G3	20..38	198..264	21..40	950	103*43*29mm
ELEMENT 42/220-240/1050 G3	22..42	198..264	21..40	1050	103*43*29mm

OSRAM LED DRIVER

Constant Voltage Element Family

- Constant Voltage Indoor Lighting LED Driver
- Up to 180W
- High Efficiency Up to %91, PFC>0,95, THD<%15
- Single Output
- Suitable with Class I / II Luminaire
- Excellent Price / Performance Ratio
- 50.000 Hours Lifetime
- IP20
- Application Area: Singage, Blacklight, Decorative Lighting, Hidden Lighting



Part Number	Power (Watt)	Vin	Vout	145*40*26,5mm
ELEMENT 30/220-240/24 G2	0..30	198..264V	24V	145*40*26,5mm
ELEMENT 60/220-240/24 G2	0..60	198..264V	24V	100*40*31mm
ELEMENT 120/220-240/24 G2	0..120	198..264V	24V	260*40*31mm
ELEMENT 180/220-240/24 G2	0..180	198..264V	24V	300*40*31mm

Linear FIT Family

- Constant Current Indoor Lighting LED Driver
- Efficiency: %90-93, PFC>0,94-0,99, THD<%5-10
- Flexible current setting
- Protection: High Temperature, High Input Voltage, Low/ High Output Voltage, Overload, Zero load, Short Circuit Protection
- Suitable with Class I Luminaire
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP20
- Applications: Linear, Area Lighting, Office, Education, Industry, Storage Areas and Retail
- CE, ENEC, VDE, EMC, EL



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT FIT 25/220-240/300 D LT2 L	2..25	198..264V	40..216V	35..300	280*30*21mm
OT FIT 35/220-240/350 D LT2 L	4,1..35	198..264V	54..216V	75..350	280*30*21mm
OT FIT 75/220-240/550 D NFC L	6,8..75	198..264V	54..216V	125..550	280*30*21mm
OT FIT 100/220-240/750 D NFC L	13..100	198..264V	54..216V	250..750	280*30*21mm
OT FIT 120/220-240/750 D LT2 L	13,5..120	198..264V	54..216V	250..750	360*30*21mm

Compact FIT Family

- Constant Current Indoor Lighting LED Driver
- Efficiency: %88-90, PFC>0,98, THD<%10
- Flexible current setting (DIPswitch – 4 currents)
- High quality of light thanks to low output ripple current
- Small housing for flexible luminaire designs
- Suitable with Class I / II Luminaire
- 50.000 Hours Lifetime
- IP20, SELV
- Suitable for downlights, spotlights and LED panels
- CE, ENEC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT FIT 20/220-240/500 CS G3	5,8..21	198..264V	23..42V	250-350-450-500	97*43*29,5mm
OT FIT 30/220-240/700 CS G3	11,5..29,4	198..264V	23..42V	500-600-650-700	97*43*29,5mm
OT FIT 40/220-240/1A0 CS G3	20..44	198..264V	25..42V	800-900-950-1050	97*43*29,5mm

OSRAM LED DRIVER

Linear IT FIT Family

- Constant Current Indoor Lighting LED Driver
- Efficiency: %84-93, PFC>0,95-0,98, THD<%15
- Flexible current setting (DIPswitch – 4 currents)
- Flicker-Free
- Small housing for flexible luminaire designs
- Suitable with Class I / II Luminaire
- 50.000 Hours Lifetime
- IP20
- CE, ENEC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Isolation	Dimension (L*W*H)
IT FIT 18/220-240/350 CS D L	5..18,9	198..264V	25..54	200-250-300-350	Non-SELV	210*30*21mm
IT FIT 40/220-240/350 CS D L	8..42	198..264V	40..120	200-250-300-350	Non-SELV	210*30*21mm
IT FIT 60/220-240/350 CS D L	18..61,2	198..264V	90..175	200-250-300-350	Non-SELV	210*30*21mm
IT FIT 75/220-240/550 CS D L	31,5..75	198..264V	90..216	350-400-500-550	Non-SELV	280*30*21mm
IT FIT 18/220-240/350 CS L	4,6..17,8	198..264V	23..51	200-250-300-350	SELV	210*30*21mm
IT FIT 40/220-240/800 CS L	11,5..40,8	198..264V	23..51	500-600-700-800	SELV	210*30*21mm
IT FIT 60/220-240/1A2 CS L	20,7..64,8	198..264V	23..54	900-1050-1100-1200	SELV	210*30*21mm
IT FIT 75/220-240/1A6 CS L	29,9..75,2	198..264V	23..54	1300-1400-1500-1600	SELV	280*30*21mm

OTi DALI Linear Family

- Constant Current Indoor Lighting LED Driver
- Efficiency: %90-94, PFC>0,95, THD<%10-20
- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- High-quality dimming of 1...100 % by amplitude dimming
- Easy to use in corridors and restrooms because of three-level Corridor function
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection
- Suitable with Class I Luminaire
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP20
- Applications: Linear, Area Lighting, Office, Education, Industry, StorageAreas and Retail
- CE, ENEC, VDE, EMC, EL

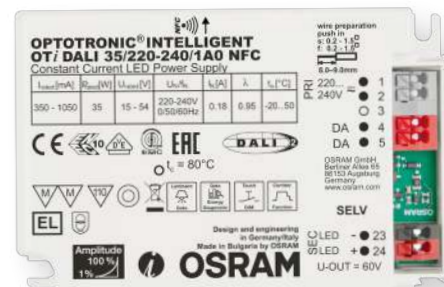


Part Number	SELV	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OTi DALI 35/220-240/400 D LT2 L	Non-SELV	4..38	198..264V	54..240V	75..400	280*30*21mm
OTi DALI 60/220-240/550 D LT2 L	Non-SELV	6,4..60	198..264V	54..240V	120..550	280*30*21mm
OTi DALI 90/220-240/700 D LT2 L	Non-SELV	13,5..90	198..264V	54..240V	250..700	280*30*21mm
OTi DALI 90/220-240/1A0 LT2 L	Non-SELV	13,5..90	198..264V	54..240V	250..1000	280*30*21mm
OTi DALI 35/220...240/700 LT2 L	SELV	4..35	198..264V	20..54V	200..700	360*30*21mm
OTi DALI 35/220-240/700 LT2 L G2	SELV	4..37	198..264V	15..54V	200..700	360*30*21mm
OTi DALI 50/220-240/1A4 LT2 L G2	SELV	12..54	198..264V	15..54V	600..1400	360*30*21mm
OTi DALI 80/220...240/1A6 LT2 L	SELV	32..80	198..264V	20..54V	600..1600	360*30*21mm
OTi DALI 80/220...240/2A1 LT2 L	SELV	32..80	198..264V	20..54V	1000..2100	360*30*21mm

OSRAM LED DRIVER

OTi DALI Compact Family

- Constant Current Indoor Lighting LED Driver
- High Efficiency up to %91, PFC>0,95-0,98, THD<%10-20
- Fully programmable via software (DALI Interface)
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- Flexible current setting via NFC
- High-quality dimming of 1...100 % by amplitude dimming
- Easy to use in corridors and restrooms because of three-level Corridor function
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection
- Suitable with Class I / II Luminaire
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP20, SELV
- Suitable for downlights, spotlights and LED panels
- CE, ENEC, VDE, EMC, EL



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OTi DALI 10/220-240/700 NFC DIM	1..10	198..264V	2,5..45V	150..700	124*31*21mm
OTi DALI 15/220-240/1A0 NFC	3..18	198..264V	7,5..54V	150..1050	95*53*30mm
OTi DALI 25/220-240/700 NFC	7..27	198..264V	15..50V	180..700	103*67*29,5mm
OTi DALI 35/220-240/1A0 NFC	14..35	198..264V	15..50V	350..1050	103*67*29,5mm
OTi DALI 50/220-240/1A4 NFC	22..55	198..264V	15..54V	600..1400	110*75*25mm

ETi DALI Linear Family

- Constant Current Indoor Lighting LED Driver
- Efficiency: %86-94, PFC>0,95, THD<%10-15
- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- High-quality dimming of 10...100 % by amplitude dimming
- No TouchDIM nor Corridor Function
- Price/Performance Advantage
- Suitable with Class I Luminaire
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP20
- Applications: Linear, Area Lighting, Office, Education, Industry, StorageAreas and Retail
- CE, ENEC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Isolation	Dimension (L*W*H)
ETi DALI 25/220-240/300 D LT2 L	3..25	198..264V	54..240	35..300	Non-SELV	280x30x21mm
ETi DALI 35/220-240/400 D LT2 L	4..38	198..264V	54..240	75..400	Non-SELV	280x30x21mm
ETi DALI 75/220-240/500 D LT2 L	8..75	198..264V	54..240	125..500	Non-SELV	280x30x21mm
ETi DALI 25/220-240/500 LT2 L	3,6..25,5	198..264V	20..51	180..500	SELV	280x30x21mm
ETi DALI 35/220-240/700 LT2 L	7..35,7	198..264V	20..51	350..700	SELV	280x30x21mm
ETi DALI 75/220-240/1A4 LT2 L	21..71,4	198..264V	20..51	600..1400	SELV	280x30x21mm

OSRAM LED DRIVER

OPTOTRONIC 1DIM/2DIM/4DIM/NON-DIM

DIM Functions Brief Information

- **DALI** is an international communication standard. Thanks to the DALI processors in the system, the drivers (atmature) can be addressed and can be dimmed at any time and desired level with DALI signal sent. The drivers can be grouped or individually controlled.
- **Step DIM:** Two output currents are specified in the StepDIM feature. By sending a signal to the SD terminal, the output current is reduced and dim is made. The output current returns to the previous level when the signal send again. StepDIM levels can be programmed with DALI Magic device.
- **Astro DIM:** It is possible to dimmable without needing a control cable, it allows automatic switching to the desired lumen levels at any time by the time counter which is inside device. In the program interface, there are sunshine periods for different cities of the World. Only the on-off signal can be sent also.
- **Phase DIM:** It is the ability to dimmable to the lumen level by reducing the supply voltage. Thanks to this feature, it is possible to work with dimmable conventional ballast luminaries by dimmable the supply voltage.

1DIM: Astro DIM

2DIM: 1-10V DIM + Astro DIM

4DIM: Dali DIM + Step DIM + Astro DIM + Phase DIM

OPTOTRONIC 1DIM FAMILY

- Constant Current Outdoor Lighting LED Driver
- Most Advanced Dimensioning Functions Available on Single Device
- Efficiency : %89-93, PFC>0,97-98, THD<%10
- Great flexibility due to wide operating temperature range of -40...55 °C
- High surge protection: up to 6 kV
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP67
- 1DIM: Astro DIM
- CE, ENEC



Part Number	DIM	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT 60/220-240/1A4 1DIM A P7	1DIM	30..60	198..264V	43..86V	400..1400	138*82*37mm
OT 100/220-240/1A4 1DIM A P7	1DIM	50..100	198..264V	72..144V	400..1400	172,6*68,5*38,6mm
OT 150/220-240/1A4 1DIM A P7	1DIM	75..150	198..264V	107..214V	400..1400	212*68,5*38,6mm
OT 200/220-240/1A4 1DIM A P7	1DIM	100..200	198..264V	143..286V	400..1400	227,5*68,5*38,6mm

OPTOTRONIC 2DIM FAMILY

- Constant Current Outdoor Lighting LED Driver
- Most Advanced Dimensioning Functions Available on Single Device
- Efficiency : %86-90, PFC>0,95, THD<%15
- Great flexibility due to wide operating temperature range of -40...55 °C
- High surge protection: up to 6 kV (in protection class I or II)
- 100.000 Hours Lifetime (Tc max: 65°C)
- Protection through double isolation between mains input and LED output
- IP64
- 2DIM functionality in one device (AstroDIM, 0...10 V)
- OT Programmer hardware for configuration of 2DIM ECGs necessary
- CE, ENEC



Part Number	DIM	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT 50/120...277/800 2DIMLT2 P	2DIM	10,5..50	108..305V	30..115V	350..800	168*50*30mm
OT 50/120...277/1A2 2DIMLT2 P	2DIM	12..50	108..305V	20..55V	600..1250	168*50*30mm
OT 100/120...277/800 2DIMLT2 P	2DIM	45..100	108..305V	50..186V	350..800	168*68*38mm
OT 110/120...277/1A4 2DIMLT2 P	2DIM	45..110	108..305V	35..85V	600..1400	168*68*38mm

OSRAM LED DRIVER

OPTOTRONIC 2DIM IP67 FAMILY

- Constant Current Outdoor Lighting LED Driver
- Efficiency : %91-93, PFC>0,98, THD<%10
- Great flexibility due to wide operating temperature range of -40...55 °C
- High surge protection: up to 10 kV (in protection class I or II)
- 100.000 Hours Lifetime (Tc max: 65°C)
- IP67
- 2DIM functionality in one device (AstroDIM, 0...10 V)
- NFC Device hardware for configuration of 2DIM ECGs necessary
- CE, ENEC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT 100/220-240/1A4 2DIM P7	10..100	198..264V	61..144	700..1400	164,4x68,5x39,6mm
OT 150/220-240/1A4 2DIM P7	15..150	198..264V	91..214	700..1400	203,4x68,5x39,6mm
OT 200/220-240/1A4 2DIM P7	20..200	198..264V	121..286	700..1400	228,4x68,5x39,6mm
OT 240/220-240/1A0 2DIM P7	24..240	198..264V	180..343	700..1400	252,4x68,5x39,6mm

OPTOTRONIC 4DIM G2 FAMILY

- Constant Current Outdoor Lighting LED Driver
- Most Advanced Dimensioning Functions Available on Single Device
- DALI-2 certified incl. Parts 251, 252, 253
- Efficiency : %87-94, PFC>0,95, THD<%10
- Great flexibility due to wide operating temperature range of -40...60 °C
- High surge protection: up to 10 kV (1 pulse) / 8 kV, in protection class I or II
- 100.000 Hours Lifetime (Tc max: 65°C)
- Protection through double isolation between mains input and LED output
- IP20
- 4DIM functionality in one device (StepDIM, AstroDIM, MainsDIM, DALI)
- Easy and fast wireless luminaire programming via NFC
- CE, ENEC, VDE, EMC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
OT 20/170-240/1A0 4DIMLT2 G2 CE	2..22	198..264V	10..38	200..1050	123x79x33mm
OT 40/170-240/1A0 4DIMLT2 G2 CE	3..40	198..264V	15..56	200..1050	123x79x33mm
OT 75/170-240/1A0 4DIMLT2 G2 CE	7..75	198..264V	35..115	200..1050	133x77x40mm
OT 110/170-240/1A0 4DIMLT2 G2 CE	16..110	198..264V	80..220	200..1050	150x90x40mm
OT 165/170-240/1A0 4DIM LT2 G2	26..165	198..264V	130..260	200..1050	170x100x40mm

IT DALI IP67 FAMILY

- Constant Current Outdoor Lighting LED Driver
- DALI-2 certified incl. Parts 251, 252, 253
- Efficiency : %86-93, PFC>0,95, THD<%10
- Great flexibility due to wide operating temperature range of -40...60 °C- High surge protection: up to 10 kV
- 100.000 Hours Lifetime (Tc max: 65°C)
- DALI dimming with DALI Magic programming
- IP67
- CE, ENEC, CCC



Part Number	Power (Watt)	Vin	Vout	I (mA)	Dimension (L*W*H)
IT DALI 20/220-240/1A0 P7	5,3..20	198..264V	15..29	350..1050	138x82,5x38mm
IT DALI 40/220-240/1A0 P7	10..40	198..264V	29..57	350..1050	138x82,5x38mm
IT DALI 75/220-240/1A0 P7	19,5..75	198..264V	55..108	350..1050	167x61,5x39,5mm
IT DALI 110/220-240/1A0 P7	26..110	198..264V	75..157	350..1050	176x61,5x39,5mm
IT DALI 150/220-240/1A0 P7	39..150	198..264V	110..214	350..1050	184x61,5x39,5mm
IT DALI 200/220-240/1A0 P7	51..200	198..264V	145..286	350..1050	226x61,5x39,5mm

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Output Current [mA]				DIM	Dimming Range	Power Factor	Efficiency	THD	Ripple	IP Protection	Dimensions				
								Set Via Dip-Switch											Current Range		Length		Width
MODEL	Type	MIn	MMax	Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]	[A]	[%]	[%]	IP	L [mm]	W[mm]	H[mm]	
OTI DX 35/220-240/400 D NFC L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	DEXAL	1...100	>0,95	90	<10	4	IP 20	360	30	21
OTI DX 75/220-240/600 D NFC L	Linear	220	240	6,5	75	54	240	120	600	-	-	-	-	DEXAL	1...100	>0,95	93	<10	4	IP 20	360	30	21
OTI DX 100/220-240/700 D NFC IND	Linear	220	240	23	100	64	300	200	700	-	-	-	-	DEXAL	1...100	>0,95	93	<10	<1	IP 20	424	30	21
OTI DX 150/220-240/850 D NFC IND	Linear	220	240	43	150	64	300	250	850	-	-	-	-	DEXAL	1...100	>0,95	95	<10	<1	IP 20	424	30	21
OTI 30/120-277/1A0 DX L	Linear	120	277	10	30	10	56	150	1050	-	-	-	-	DEXAL	1...100	>0,95	88	<10	<1	IP 20	360	30	26
OTI 50/120-277/1A4 DX L	Linear	120	277	15	50	10	56	600	1400	-	-	-	-	DEXAL	1...100	>0,95	88	<10	<1	IP 20	360	30	26
OTI DALI 75/220-240/550 D NFC IND L	Linear	220	240	8	75	64	300	125	550	-	-	-	-	DALI	1...100	>0,98	94	<10	<1	IP 20	360	30	21
OTI DALI 100/220-240/700 D NFC IND L	Linear	220	240	28	100	64	300	200	700	-	-	-	-	DALI	1...100	>0,98	95	7	<1	IP 20	360	30	21
OTI DALI 150/220-240/1A0 D NFC IND L	Linear	220	240	43	150	64	300	250	1000	-	-	-	-	DALI	1...100	>0,98	95	7	<1	IP 20	425	30	21
OTI DALI 300/220-240/1A6 D NFC IND L	Linear	220	240	80	300	60	300	250	1550	-	-	-	-	DALI	1...100	0,99	96	9	<1	IP 20	360	46	28
OTI DALI 35/220...240/400 D LT2 UF L	Linear	220	240	0,5	38	54	240	75	400	-	-	-	-	DALI	1...100	>0,95	92	<10	<5	IP 20	360	30	11
OTI DALI 75/220...240/700 D LT2 UF L	Linear	220	240	8	75	54	240	150	700	-	-	-	-	DALI	1...100	>0,95	92	<10	<5	IP 20	360	30	11
OTI DALI 35/220-240/400 D NFC TW L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	DALI	1...100	>0,95	90	<10	<1	IP 20	360	30	21
OTI DALI 75/220-240/700 D NFC TW L	Linear	220	240	8,1	75	54	240	125	700	-	-	-	-	DALI	1...100	>0,98	91	<10	<1	IP 20	360	30	21
OTI DALI 35/220-240/700 NFC TW L	Linear	220	240	4	38	15	54	200	700	-	-	-	-	DALI	1...100	>0,95	88	<15	<1	IP 20	360	30	21
OTI DALI 75/220-240/1A4 NFC TW L	Linear	220	240	8	75	15	54	400	1400	-	-	-	-	DALI	1...100	>0,95	90	<10	<1	IP 20	360	30	21
OTI DALI 35/220-240/400 D LT2 L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	DALI	1...100	>0,95	92	<10	<1	IP 20	280	30	21
OTI DALI 60/220-240/550 D LT2 L	Linear	220	240	6,4	60	54	240	120	550	-	-	-	-	DALI	1...100	>0,95	93	<10	<1	IP 20	280	30	21
OTI DALI 90/220-240/700 D LT2 L	Linear	220	240	13,5	90	54	240	250	700	-	-	-	-	DALI	1...100	>0,95	93	<10	<1	IP 20	280	30	21
OTI DALI 90/220-240/1A0 LT2 L	Linear	220	240	13,5	90	54	240	250	1000	-	-	-	-	DALI	1...100	>0,95	94	<10	<1	IP 20	280	30	21
OTI DALI 100/220-240/750 D NFC L (PMD)	Linear	220	240	5,4	100	54	260	100	750	-	-	-	-	DALI	1...100	>0,95	94	<10	<1	IP 20	280	30	21
OTI DALI 25/220-240/300 D NFC F L	Linear	220	240	2,7	25	54	240	35	300	-	-	-	-	DALI	1...100	>0,95	90,5	9,5	<1	IP 20	280	30	16
OTI DALI 35/220-240/400 D NFC F L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	DALI	1...100	>0,97	92	8	<1	IP 20	280	30	16
OTI DALI 75/220-240/500 D NFC F L	Linear	220	240	6,5	75	54	240	120	500	-	-	-	-	DALI	1...100	>0,98	94	5,5	<1	IP 20	280	30	16
OTI DALI 35/220-240/700 LT2 L G2 (PMD)	Linear	220	240	4	37	15	54	200	700	-	-	-	-	DALI	1...100	>0,95	90	<15	<1	IP 20	360	30	21
OTI DALI 50/220-240/1A4 LT2 L G2 (PMD)	Linear	220	240	12	54	15	54	600	1400	-	-	-	-	DALI	1...100	>0,95	91	<15	<1	IP 20	360	30	21
OTI DALI 25/220-240/700 NFC L (PMD)	Linear	220	240	25	15	54	180	700	700	-	-	-	-	DALI	1...100	>0,95	90	<10	<3	IP 20	280	30	21
OTI DALI 35/220-240/1A0 NFC L (PMD)	Linear	220	240	35	15	54	350	1050	1050	-	-	-	-	DALI	1...100	>0,95	91	<10	<3	IP 20	280	30	21
OTI DALI 50/220-240/1A4 NFC L (PMD)	Linear	220	240	50	15	54	600	1400	1400	-	-	-	-	DALI	1...100	>0,95	91	<10	<3	IP 20	280	30	21
OTI DALI 35/220-240/700 LT2 L G2	Linear	220	240	4	37	15	54	200	700	-	-	-	-	DALI	1...100	>0,95	90	<15	<1	IP 20	360	30	21
OTI DALI 50/220-240/1A4 LT2 L G2	Linear	220	240	12	54	15	54	600	1400	-	-	-	-	DALI	1...100	>0,95	91	<15	<1	IP 20	360	30	21
OTI DALI 80/220...240/1A6 LT2 L	Linear	220	240	32	80	20	54	600	1600	-	-	-	-	DALI	1...100	>0,95	>90	<20	<1	IP 20	360	30	21
OTI DALI 80/220...240/2A1 LT2 L	Linear	220	240	32	80	20	54	1000	2100	-	-	-	-	DALI	1...100	>0,95	>90	<20	<1	IP 20	360	30	21
ETI DALI 25/220-240/300 D LT2 L	Linear	220	240	3	25	54	240	35	300	-	-	-	-	DALI	10...100	>0,95	90	<10	<4	IP 20	280	30	21
ETI DALI 35/220-240/400 D LT2 L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	DALI	10...100	>0,95	92	<10	<4	IP 20	280	30	21
ETI DALI 75/220-240/500 D LT2 L	Linear	220	240	8	75	54	240	125	500	-	-	-	-	DALI	10...100	>0,95	94	<10	<4	IP 20	280	30	21
ETI DALI 25/220-240/500 LT2 L	Linear	220	240	3,6	25,5	20	51	180	500	-	-	-	-	DALI	10...100	>0,95	86	<15	<3	IP 20	280	30	21
ETI DALI 35/220-240/700 LT2 L	Linear	220	240	7	35,7	20	51	350	700	-	-	-	-	DALI	10...100	>0,98	87	<15	<3	IP 20	280	30	21
ETI DALI 75/220-240/1A4 LT2 L	Linear	220	240	12	71,4	20	51	600	1400	-	-	-	-	DALI	10...100	>0,98	89	<15	<3	IP 20	280	30	21

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Output Current [mA]				DIM		Dimming Range	Power Factor	Efficiency	THD	Ripple	IP Protection	Dimensions			
		Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]							[%]	[%]	L [mm]	W[mm]
MODEL	Type																						
OT-FIT 380/230-400/1A4 NFC HC L	Linear	220	240	140	380	150	550	400	1400	-	-	-	-	Hayrr/No	n/a	>0,99	97	<7	<1	IP 20	400	40	40
OT FIT 75/220-240/550 D NFC IND L	Linear	220	240	8	75	64	300	125	550	-	-	-	-	Hayrr/No	n/a	>0,97	95	10	<1	IP 20	360	30	21
OT FIT 100/220-240/700 D NFC IND	Linear	220	240	28	100	64	300	200	700	-	-	-	-	Hayrr/No	n/a	>0,98	96	<7	<1	IP 20	360	30	21
OT FIT 150/220-240/1A0 D NFC IND	Linear	220	240	43	150	64	300	250	1000	-	-	-	-	Hayrr/No	n/a	>0,98	95	<7	<1	IP 20	360	30	21
OT FIT 300/220-240/1A6 D NFC IND L	Linear	220	240	40	300	60	300	250	1550	-	-	-	-	Hayrr/No	n/a	>0,99	96	10	<1	IP 20	360	46	28
OT FIT 35/220-240/400 D LT2 UF L	Linear	220	240	4	38	54	240	75	400	-	-	-	-	Hayrr/No	n/a	>0,95	91	<10	<1	IP 20	360	30	11
OT FIT 75/220-240/700 D LT2 UF L	Linear	220	240	8	75	54	240	150	700	-	-	-	-	Hayrr/No	n/a	>0,95	93	<10	<1	IP 20	360	30	11
OT FIT 30/220...240/125 D L	Linear	220	240	6,8	27	54	216	-	-	-	125	-	-	Hayrr/No	n/a	>0,95	>90	<20	<10	IP 20	210	30	21
OT FIT 45/220-240/200 D L	Linear	220	240	11,5	44	54	216	-	-	-	200	-	-	Hayrr/No	n/a	>0,95	>90	<20	<10	IP 20	210	30	21
OT FIT 50/220...240/250 D L	Linear	220	240	13,5	54	54	216	-	-	-	250	-	-	Hayrr/No	n/a	>0,95	>90	<20	<10	IP 20	210	30	21
OT FIT 50/220...240/300 D L	Linear	220	240	16,2	52,5	54	175	-	-	-	300	-	-	Hayrr/No	n/a	>0,95	>90	<20	<10	IP 20	210	30	21
OT FIT 50/220...240/350 D L	Linear	220	240	18,9	52,5	54	150	-	-	-	350	-	-	Hayrr/No	n/a	>0,95	>90	<20	<10	IP 20	210	30	21
OT FIT 35/220-240/350 D CS L	Linear	220	240	8	40,3	40	160	-	-	200	250	300	350	Hayrr/No	n/a	0,98	91	<10	<5	IP 20	210	30	21
OT FIT 65/220-240/350 D CS L	Linear	220	240	16	66,5	70	220	-	-	200	250	300	350	Hayrr/No	n/a	0,98	93	<10	<5	IP 20	210	30	21
OT FIT 75/220-240/350 D CS L	Linear	220	240	14	77	70	220	-	-	200	250	300	350	Hayrr/No	n/a	0,98	93	<10	<5	IP 20	210	30	21
OT FIT 25/220-240/300 D LT2 L	Linear	220	240	2	25	40	216	35	300	-	-	-	-	Hayrr/No	n/a	0,94	90	10	<5	IP 20	280	30	21
OT FIT 35/220-240/350 D LT2 L	Linear	220	240	4,1	35	54	216	75	350	-	-	-	-	Hayrr/No	n/a	>0,95	>92	<10	<1	IP 20	280	30	21
OT FIT 75/220-240/550 D LT2 L	Linear	220	240	6,8	75	54	216	125	550	-	-	-	-	Hayrr/No	n/a	>0,98	>93	<5	<1	IP 20	280	30	21
OT FIT 120/220-240/750 D LT2 L	Linear	220	240	13,5	120	54	216	250	750	-	-	-	-	Hayrr/No	n/a	>0,99	93	<5	<1	IP 20	360	30	21
OT FIT 35/220-240/350 D NFC L	Linear	220	240	6	35	54	216	75	350	-	-	-	-	Hayrr/No	n/a	>0,95	93	<10	<1	IP 20	280	30	21
OT FIT 75/220-240/550 D NFC L	Linear	220	240	10	75	54	216	125	550	-	-	-	-	Hayrr/No	n/a	>0,95	94	<7	<1	IP 20	280	30	21
OT FIT 100/220-240/750 D NFC L	Linear	220	240	13	100	54	216	250	750	-	-	-	-	Hayrr/No	n/a	>0,95	95	<7	<1	IP 20	280	30	21
OT FIT 25/220-240/250 D NFC F L	Linear	220	240	4	25	54	216	35	250	-	-	-	-	Hayrr/No	n/a	>0,94	91	<10	<1	IP 20	280	30	16
OT FIT 35/220-240/400 D NFC F L	Linear	220	240	6	35	54	216	75	400	-	-	-	-	Hayrr/No	n/a	>0,96	93	<10	<1	IP 20	280	30	16
OT FIT 75/220-240/500 D NFC F L	Linear	220	240	8	75	54	216	125	500	-	-	-	-	Hayrr/No	n/a	>0,98	95	<10	<1	IP 20	280	30	16
OT FIT 35/220-240/700 CS L G2	Linear	220	240	13,5	35,7	27	51	-	-	500	600	650	700	Hayrr/No	n/a	0,98	86	<10	<5	IP 20	280	30	21
OT FIT 55/220-240/1A0 CS L G2	Linear	220	240	21,6	53,6	27	51	-	-	800	900	975	1050	Hayrr/No	n/a	>0,98	>89	<10	<5	IP 20	280	30	21
OT FIT 75/220-240/1A4 CS L G2	Linear	220	240	29,7	75,6	27	51	-	-	1100	1200	1300	1400	Hayrr/No	n/a	>0,98	>87	<10	<5	IP 20	360	30	21
OT FIT 25/220-240/500 NFC L	Linear	220	240	8	25	20	51	100	500	-	-	-	-	Hayrr/No	n/a	>0,98	91	<10	<4	IP 20	280	30	21
OT FIT 35/220-240/700 NFC L	Linear	220	240	13	35	20	51	200	700	-	-	-	-	Hayrr/No	n/a	>0,95	90	<10	<4	IP 20	280	30	21
OT FIT 55/220-240/1A0 NFC L	Linear	220	240	21	55	20	51	400	1050	-	-	-	-	Hayrr/No	n/a	>0,97	90	<10	<4	IP 20	280	30	21
OT FIT 75/220-240/1A4 NFC L	Linear	220	240	29	75	20	51	600	1400	-	-	-	-	Hayrr/No	n/a	>0,98	91	<10	<4	IP 20	360	30	21
IT FIT 18/220-240/350 CS D L	Linear	220	240	5	18,9	25	54	-	-	200	250	300	350	Hayrr/No	n/a	>0,95	87	<15	<5	IP 20	210	30	21
IT FIT 40/220-240/350 CS D L	Linear	220	240	8	42	40	120	-	-	200	250	300	350	Hayrr/No	n/a	>0,98	92	<15	<5	IP 20	210	30	21
IT FIT 60/220-240/350 CS D L	Linear	220	240	18	61,2	90	175	-	-	200	250	300	350	Hayrr/No	n/a	>0,98	93	<15	<5	IP 20	210	30	21
IT FIT 75/220-240/550 CS D L	Linear	220	240	31,5	75	90	216	-	-	350	400	500	550	Hayrr/No	n/a	>0,98	93	<15	<5	IP 20	210	30	21
IT FIT 18/220-240/350 CS L	Linear	220	240	4,6	17,8	23	51	-	-	200	250	300	350	Hayrr/No	n/a	>0,96	84	<15	<5	IP 20	210	30	21
IT FIT 40/220-240/800 CS L	Linear	220	240	11,5	40,8	23	51	-	-	500	600	700	800	Hayrr/No	n/a	>0,96	86	<15	<5	IP 20	210	30	21
IT FIT 60/220-240/1A2 CS L	Linear	220	240	20,7	64,8	23	54	-	-	900	1050	1100	1200	Hayrr/No	n/a	>0,98	87	<15	<5	IP 20	210	30	21

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Current Range			Set Via Dip-Switch				DIM		Dimming Range	Power Factor	Efficiency	THD	Ripple	IP Protection	Dimensions		
		Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]	[A]	[%]	[%]							[mm]	Width	Height
MODEL	Type	Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]	[A]	[%]	[%]	[mm]	W[mm]	H[mm]						
IT FIT 75/220-240/1A6 CS L	Linear	220	240	29,9	75,2	23	54	-	-	1300	1400	1500	1600	Hayır/No	n/a	>0,98	87	<15	<5	IP 20	280	30	21		
EM FIT 18/220-240/350 D CS L	Linear	220	240	5	18,9	27	54	-	-	200	250	300	350	Hayır/No	n/a	>0,95	88	<20	<10	IP 20	210	30	21		
EM FIT 40/220-240/350 D CS L	Linear	220	240	8	42	40	120	-	-	200	250	300	350	Hayır/No	n/a	>0,95	90	<20	<10	IP 20	210	30	21		
EM FIT 60/220-240/350 D CS L	Linear	220	240	18	61,25	90	175	-	-	200	250	300	350	Hayır/No	n/a	>0,95	91	<20	<10	IP 20	210	30	21		
EM FIT 75/220-240/550 D CS L	Linear	220	240	31,5	75,6	90	216	-	-	350	400	500	550	Hayır/No	n/a	>0,95	92	<20	<10	IP 20	210	30	21		
EM FIT 18/220-240/350 CS L	Linear	220	240	5,4	17,85	27	51	-	-	200	250	300	350	Hayır/No	n/a	>0,95	84	<20	<10	IP 20	210	30	21		
EM FIT 40/220-240/800 CS L	Linear	220	240	13,5	40,8	27	51	-	-	500	600	700	800	Hayır/No	n/a	>0,95	87	<20	<10	IP 20	210	30	21		
EM FIT 60/220-240/1A2 CS L	Linear	220	240	24,3	61,2	27	51	-	-	900	1050	1100	1200	Hayır/No	n/a	>0,95	88	<20	<10	IP 20	280	30	21		
EM FIT 75/220-240/1A6 CS L	Linear	220	240	35,1	81,6	27	51	-	-	1300	1400	1500	1600	Hayır/No	n/a	>0,95	89	<20	<10	IP 20	280	30	21		
ELEMENT 35/220-240/800 CS L	Linear	220	240	11,5	40	23	51	-	-	500	600	700	800	Hayır/No	n/a	0,98	88	<20	<30	IP 20	210	30	21		
ELEMENT 55/220-240/1A2 CS L	Linear	220	240	21	61	23	51	-	-	920	1050	1075	1200	Hayır/No	n/a	0,98	89	<20	<30	IP 20	280	30	21		
ELEMENT 18/220-240/350 D CS L	Linear	220	240	5	18,9	25	54	-	-	200	250	300	350	Hayır/No	n/a	0,97	88	<20	<30	IP 20	210	30	21		
ELEMENT 40/220-240/350 D CS L	Linear	220	240	11	42	55	120	-	-	200	250	300	350	Hayır/No	n/a	0,98	92	<20	<30	IP 20	210	30	21		
ELEMENT 60/220-240/350 D CS L	Linear	220	240	20	63	90	175	-	-	200	250	300	350	Hayır/No	n/a	0,98	94	<20	<30	IP 20	210	30	21		
OTI DX 25/220-240/700 NFC	Compact	220	240	7	27	15	50	180	700	-	-	-	-	DEXAL 1...100	>0,98	88	<10	<3	IP 20	103	67	29,5			
OTI DX 35/220-240/1A0 NFC	Compact	220	240	14	35	15	50	350	1050	-	-	-	-	DEXAL 1...100	>0,98	90	<10	<3	IP 20	103	67	29,5			
OTI DX 50/220-240/1A4 NFC	Compact	220	240	22	55	15	54	600	1400	-	-	-	-	DEXAL 1...100	>0,95	91	<10	<3	IP 20	110	75	25			
OTI QBM 20/220-240/500 NFC I	Compact	220	240	4	20	20	50	200	500	-	-	-	-	QBM 1...100	>0,95	88	<10	<5	IP 20	204	50	32			
OTI QBM 30/220-240/700 NFC I	Compact	220	240	7	30	20	50	350	700	-	-	-	-	QBM 1...100	>0,95	90	<10	<5	IP 20	204	50	32			
OTI QBM 40/220-240/1A0 NFC I	Compact	220	240	10	40	20	50	500	1050	-	-	-	-	QBM 1...100	>0,95	91	<10	<5	IP 20	204	50	32			
OTI QBM 20/220-240/500 NFC S	Compact	220	240	4	20	20	50	200	500	-	-	-	-	QBM 1...100	>0,95	88	<10	<5	IP 20	97	43	29,5			
OTI QBM 30/220-240/700 NFC S	Compact	220	240	7	30	20	50	350	700	-	-	-	-	QBM 1...100	>0,95	90	<10	<5	IP 20	97	43	29,5			
OTI QBM 40/220-240/1A0 NFC S	Compact	220	240	10	40	20	50	500	1050	-	-	-	-	QBM 1...100	>0,95	91	<10	<5	IP 20	97	43	29,5			
OTI DALI 35/220-240/1A0 NFC TW	Compact	220	240	5,25	38	15	54	350	1050	-	-	-	-	DALI2 1...100	>0,95	90	<10	<1	IP 20	135	75	25			
OTI DALI 50/220-240/1A4 NFC TW	Compact	220	240	9	55	15	54	600	1400	-	-	-	-	DALI2 1...100	>0,95	91	<10	<1	IP 20	135	75	25			
OTI DALI 10/220-240/700 NFC	Compact	220	240	1	10	2,5	45	150	700	-	-	-	-	DALI 1...100	>0,98	82	<15	<2	IP 20	124	31	21			
OTI DALI 15/220-240/1A0 NFC	Compact	220	240	3	18	7,5	54	150	1050	-	-	-	-	DALI 1...100	0,95	88	<10	<2	IP 20	95	53	30			
OTI DALI 25/220-240/700 NFC	Compact	220	240	7	27	15	50	180	700	-	-	-	-	DALI 1...100	>0,98	88	<10	<3	IP 20	103	67	29,5			
OTI DALI 35/220-240/1A0 NFC	Compact	220	240	14	35	15	50	350	1050	-	-	-	-	DALI 1...100	>0,98	90	<10	<3	IP 20	103	67	29,5			
OTI DALI 50/220-240/1A4 NFC	Compact	220	240	22	55	15	54	600	1400	-	-	-	-	DALI 1...100	0,95	91	<10	<3	IP 20	110	75	25			
OTI DALI 10/220-240/700 NFC I	Compact	220	240	1,5	10	2,5	45	150	700	-	-	-	-	DALI2 1...100	>0,98	82	<15	<2	IP 20	166	30	22			
OTI DALI 20/220-240/500 NFC I	Compact	220	240	4	20	20	50	200	500	-	-	-	-	DALI 1...100	>0,95	88	<10	<5	IP 20	204	50	32			
OTI DALI 30/220-240/700 NFC I	Compact	220	240	10	30	20	50	350	700	-	-	-	-	DALI 1...100	>0,95	90	<10	<5	IP 20	204	50	32			
OTI DALI 40/220-240/1A0 NFC I	Compact	220	240	20	40	20	50	500	1050	-	-	-	-	DALI 1...100	>0,95	91	<10	<5	IP 20	204	50	32			
OTI DALI 10/220-240/700 NFC DIM	Compact	220	240	1	10	2,5	45	150	700	-	-	-	-	DALI 1...100	>0,98	82	<15	<2	IP 20	124	31	21			
OTI DALI 20/220-240/500 NFC S	Compact	220	240	4	20	20	50	200	500	-	-	-	-	DALI 1...100	>0,95	88	<10	<5	IP 20	97	43	29,5			
OTI DALI 30/220-240/700 NFC S	Compact	220	240	10	30	20	50	350	700	-	-	-	-	DALI 1...100	>0,95	90	<10	<5	IP 20	97	43	29,5			
OTI DALI 40/220-240/1A0 NFC S	Compact	220	240	20	40	20	50	500	1050	-	-	-	-	DALI 1...100	>0,95	91	<10	<5	IP 20	97	43	29,5			
OT FIT 20/220-240/500 CS T-B	Compact	220	240	6,3	20	25	40	-	-	250	350	450	500	Hayır/No	n/a	0,98	85	<10	<5	IP 20	162	32	46		

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Output Current [mA]				DIM		Dimming Range		Power Factor		Efficiency		THD		Ripple		IP Protection		Dimensions		
		Min	Max	Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]	[%]	[%]	[%]	[%]	[%]	[%]	[%]	L [mm]	Width	Height			
MODEL	Type																											
OT FIT 20/220-240/500 CS T-W	Compact	220	240	6,3	20	25	40	-	-	250	350	450	500	Hayır/No	n/a	0,98	85	<10	<5	IP 20	162	32	46					
OT FIT 20/220-240/500 CS T-G	Compact	220	240	6,3	20	25	40	-	-	250	350	450	500	Hayır/No	n/a	0,98	85	<10	<5	IP 20	162	32	46					
OT FIT 30/220-240/800 CS T-B	Compact	220	240	16,2	32	27	40	-	-	600	700	750	800	Hayır/No	n/a	0,98	87	<10	<5	IP 20	162	32	46					
OT FIT 30/220-240/800 CS T-W	Compact	220	240	16,2	32	27	40	-	-	600	700	750	800	Hayır/No	n/a	0,98	87	<10	<5	IP 20	162	32	46					
OT FIT 30/220-240/800 CS T-G	Compact	220	240	16,2	32	27	40	-	-	600	700	750	800	Hayır/No	n/a	0,98	87	<10	<5	IP 20	162	32	46					
OT FIT 40/220-240/1A0 CS T-B	Compact	220	240	23	42	27	40	-	-	850	900	950	1050	Hayır/No	n/a	0,98	89	<10	<5	IP 20	162	32	46					
OT FIT 40/220-240/1A0 CS T-W	Compact	220	240	23	42	27	40	-	-	850	900	950	1050	Hayır/No	n/a	0,98	89	<10	<5	IP 20	162	32	46					
OT FIT 40/220-240/1A0 CS T-G	Compact	220	240	23	42	27	40	-	-	850	900	950	1050	Hayır/No	n/a	0,98	89	<10	<5	IP 20	162	32	46					
OT FIT 15/220-240/500 LT2 LP	Compact	220	240	4,5	17,5	15	50	150	500	-	-	-	-	Hayır/No	n/a	>0,95	84	<15	<5	IP 20	103	67	22,5					
OT FIT 25/220-240/700 LT2 LP	Compact	220	240	8	26,5	15	50	300	700	-	-	-	-	Hayır/No	n/a	>0,95	86	<15	<5	IP 20	103	67	22,5					
OT FIT 40/220-240/1A0 LT2 LP	Compact	220	240	13	40	15	50	500	1050	-	-	-	-	Hayır/No	n/a	>0,98	87,5	<10	<5	IP 20	103	67	22,5					
OT FIT 15/220-240/500 LT2 S	Compact	220	240	5	17,5	15	50	150	500	-	-	-	-	Hayır/No	n/a	>0,95	84	<15	<1	IP 20	97	43	29,5					
OT FIT 25/220-240/700 LT2 S	Compact	220	240	8	26,5	15	50	300	700	-	-	-	-	Hayır/No	n/a	>0,95	86,5	<15	<1	IP 20	97	43	29,5					
OT FIT 40/220-240/1A0 LT2 S	Compact	220	240	13	40	15	50	500	1050	-	-	-	-	Hayır/No	n/a	>0,97	87,5	<12	<1	IP 20	97	43	29,5					
OT FIT 15/220-240/350 NFC	Compact	220	240	2,7	14	18	40	150	350	-	-	-	-	Hayır/No	n/a	0,98	85	<10	<5	IP 20	97	43	29,5					
OT FIT 25/220-240/700 NFC	Compact	220	240	6,3	28	18	40	350	700	-	-	-	-	Hayır/No	n/a	0,98	89	<10	<5	IP 20	97	43	29,5					
OT FIT 40/220-240/1A0 NFC	Compact	220	240	12,6	42	18	40	700	1050	-	-	-	-	Hayır/No	n/a	0,98	89	<10	<5	IP 20	97	43	29,5					
OT FIT 20/220-240/500 CS G3	Compact	220	240	5,8	21	23	42	-	-	250	350	450	500	Hayır/No	n/a	0,98	88	<10	<5	IP 20	97	43	29,5					
OT FIT 30/220-240/700 CS G3	Compact	220	240	11,5	29,4	23	42	-	-	500	600	650	700	Hayır/No	n/a	0,98	89	<10	<5	IP 20	97	43	29,5					
OT FIT 40/220-240/1A0 CS G3	Compact	220	240	20	44,1	25	42	-	-	800	900	950	1050	Hayır/No	n/a	0,98	90	<10	<5	IP 20	97	43	29,5					
OT FIT 75/220-240/1A6 CS	Compact	220	240	32,5	77	27	57	-	-	1200	1350	1500	1650	Hayır/No	n/a	0,98	91	<10	<5	IP 20	103	67	29,5					
OT FIT 8/220-240/180 CS I MINI	Compact	220	240	2,7	7,6	30	42	-	-	90	120	150	180	Hayır/No	n/a	0,95	86	<15	<3	IP 20	104	30	26					
OT FIT 8/220-240/180 CS S MINI	Compact	220	240	2,7	7,6	30	42	-	-	90	120	150	180	Hayır/No	n/a	0,95	86	<15	<3	IP 20	87	30	20					
OT FIT 15/220-240/350 CS S MINI	Compact	220	240	6,7	14,7	30	42	-	-	225	250	325	350	Hayır/No	n/a	0,95	88	<10	<3	IP 20	87	30	20					
OT FIT 20/220-240/500 CS S MINI	Compact	220	240	12	21	30	42	-	-	400	450	475	500	Hayır/No	n/a	0,95	89	<10	<3	IP 20	87	30	20					
OT FIT 30/220-240/700 CS S MINI	Compact	220	240	17	29	30	42	-	-	550	600	650	700	Hayır/No	n/a	0,95	89	<10	<3	IP 20	87	30	20					
OT FIT 38/220-240/900 CS S MINI	Compact	220	240	27	37,8	30	42	-	-	800	850	875	900	Hayır/No	n/a	0,95	90	<10	<3	IP 20	87	30	20					
IT FIT 4/220-240/400 CS I	Compact	220	240	0,25	4	2,5	10	-	-	100	200	300	400	Hayır/No	n/a	0,8	75	<10	<5	IP 20	104	30	26					
IT FIT 7/220-240/700 CS I	Compact	220	240	0,88	7,7	2,5	11	-	-	350/400	450/500	550/600	650/700	Hayır/No	n/a	0,9	80	<10	<5	IP 20	104	30	26					
IT FIT 11/220-240/500 CS I	Compact	220	240	3,85	10,5	11	21	-	-	350	400	450	500	Hayır/No	n/a	0,95	86	<10	<5	IP 20	104	30	26					
IT FIT 15/220-240/700 CS I	Compact	220	240	6,1	14,7	11	21	-	-	550	600	650	700	Hayır/No	n/a	0,95	86	<10	<5	IP 20	104	30	26					
ELEMENT 6/220-240/150 G3	Compact	220	240	3,6	6,3	24	42	-	-	-	150	-	-	Hayır/No	n/a	0,95	82	<20	<5	IP 20	90	43	22					
ELEMENT 8/220-240/200 G3	Compact	220	240	4,8	8,4	24	42	-	-	-	200	-	-	Hayır/No	n/a	0,95	83	<20	<5	IP 20	90	43	22					
ELEMENT 10/220-240/250 G3	Compact	220	240	6	10,5	24	42	-	-	-	250	-	-	Hayır/No	n/a	0,95	85	<15	<5	IP 20	90	43	22					
ELEMENT 12/220-240/300 G3	Compact	220	240	7,2	12,6	24	42	-	-	-	300	-	-	Hayır/No	n/a	0,97	86	<10	<5	IP 20	90	43	22					
ELEMENT 15/220-240/350 G3	Compact	220	240	8,4	14,7	24	42	-	-	-	350	-	-	Hayır/No	n/a	0,98	86	<10	<5	IP 20	90	43	22					
ELEMENT 20/220-240/500 G3	Compact	220	240	10,5	20	21	40	-	-	-	500	-	-	Hayır/No	n/a	0,97	87	<15	<5	IP 20	103	43	29					
ELEMENT 25/220-240/600 G3	Compact	220	240	12,6	24	21	40	-	-	-	600	-	-	Hayır/No	n/a	0,97	87	<15	<5	IP 20	103	43	29					
ELEMENT 28/220-240/700 G3	Compact	220	240	14,7	28	21	40	-	-	-	700	-	-	Hayır/No	n/a	0,97	88	<20	<5	IP 20	103	43	29					

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Output Current [mA]				DIM	Dimming Range	Power Factor	Efficiency	THD	Ripple	IP Protection	Dimensions				
								Current Range		Set Via Dip-Switch									Length	Width	Height		
MODEL	Type	MIn	MMax	MIn	MMax	MIn	MMax	1	2	3	4	DIM	[%]	[A]	[%]	[%]	IP	L [mm]				W[mm]	H[mm]
ELEMENT 33/220-240/800 G3	Compact	220	240	16,8	32	21	40	-	-	800	-	-	Hayir/No	n/a	0,97	88	<20	<5	IP 20	103	43	29	
ELEMENT 35/220-240/900 G3	Compact	220	240	18,9	36	21	40	-	-	900	-	-	Hayir/No	n/a	0,96	89	<20	<5	IP 20	103	43	29	
ELEMENT 38/220-240/950 G3	Compact	220	240	20	38	21	40	-	-	950	-	-	Hayir/No	n/a	0,96	89	<20	<5	IP 20	103	43	29	
ELEMENT 42/220-240/1050 G3	Compact	220	240	22	42	21	40	-	-	1050	-	-	Hayir/No	n/a	0,96	90	<20	<5	IP 20	103	43	29	
Element LD 60/220...240/1A4	Compact	220	240	29	59	21	42	-	-	1400	-	-	Hayir/No	n/a	>0,98	>90	<10	<15	IP 20	110	75	29,5	
OTe 10/220...240/700 PC	Compact	220	240	5	10	7	14	-	-	700	-	-	Triac	10...100	0,95	79	<20	<35	IP 20	95	53	25	
OTe 13/220...240/350 PC	Compact	220	240	6	13	18	38	-	-	350	-	-	Triac	10...100	0,95	84	<20	25	IP 20	95	53	25	
OTe 18/220...240/350 PC	Compact	220	240	13	18	27	54	-	-	350	-	-	Triac	10...100	0,95	86	<15	<35	IP 20	95	53	30	
OTe 18/220...240/500 PC	Compact	220	240	9	18	18	36	-	-	500	-	-	Triac	10...100	0,95	86	<15	<35	IP 20	95	53	30	
OTe 25/220...240/700 PC	Compact	220	240	12,6	25	18	36	-	-	700	-	-	Triac	10...100	0,95	86	<15	<35	IP 20	95	53	30	
OTe 35/220...240/700 PC	Compact	220	240	19	35	27	50	-	-	700	-	-	Triac	10...100	0,95	87	<20	<35	IP 20	153	54	36	
OT FIT 8/220-240/180 CS PC	Compact	220	240	2,7	7,2	27	40	-	-	100	120	155	180	Triac	5...100	0,95	>80	<20	<5	IP 20	95	50	22
OT FIT 8/220-240/180 CS PC ScrewTerminals	Compact	220	240	2,7	7,2	27	40	-	-	100	120	155	180	Triac	5...100	0,95	>80	<20	<5	IP 20	95	50	22
OT FIT 18/220-240/450 CS PC	Compact	220	240	6,1	18	27	40	-	-	225	325	350	450	Triac	5...100	0,95	>82	<20	<5	IP 20	95	50	22
OT FIT 18/220-240/450 CS PC ScrewTerminals	Compact	220	240	6,1	18	27	40	-	-	225	325	350	450	Triac	5...100	0,95	>82	<20	<5	IP 20	95	50	22
OT FIT 30/220-240/700 CS PC	Compact	220	240	13,5	28	27	40	-	-	500	700	-	Triac	5...100	>0,90	84	<20	<5	IP 20	95	53	30	
OT FIT 40/220-240/1A0 CS PC	Compact	220	240	21,6	42	27	40	-	-	800	900	950	1050	Triac	5...100	>0,95	85	<20	<5	IP 20	108	67	22
OT FIT 40/220-240/1A0 CS PC SC	Compact	220	240	21,6	42	27	40	-	-	800	900	950	1050	Triac	5...100	>0,95	85	<20	<5	IP 20	108	67	22
OT DX 40/220-240/1A0 DIMA LT2 E	Outdoor	220	240	3	40	15	56	200	1050	-	-	-	DEXAL	10...100	0,95	89	<10	10	IP 20	133	77	40	
OT DX 75/220-240/1A0 DIMA LT2 E	Outdoor	220	240	7	75	35	115	200	1050	-	-	-	DEXAL	10...100	0,95	93	<10	10	IP 20	150	90	40	
OT DX 110/220-240/1A0 DIMA LT2 E	Outdoor	220	240	16	110	80	220	200	1050	-	-	-	DEXAL	10...100	0,95	93	<10	10	IP 20	170	100	40	
OT DX 165/220-240/1A0 DIMA LT2 E	Outdoor	220	240	26	165	130	260	200	1050	-	-	-	DEXAL	10...100	0,95	94	<10	10	IP 20	170	100	40	
OT 20/170-240/1A0 4DIMLT2 G2 CE	Outdoor	220	240	2	22	10	38	200	1050	-	-	-	4DIM	10...100	>0,95	87	<10	<5	IP 20	123	79	33	
OT 40/170-240/1A0 4DIMLT2 G2 CE	Outdoor	220	240	3	40	15	56	200	1050	-	-	-	4DIM	10...100	>0,95	90	<10	<5	IP 20	123	79	33	
OT 75/170-240/1A0 4DIMLT2 G2 CE	Outdoor	220	240	7	75	35	115	200	1050	-	-	-	4DIM	10...100	>0,98	93	<5	<6	IP 20	133	77	40	
OT 110/170-240/1A0 4DIMLT2 G2 CE	Outdoor	220	240	16	110	80	220	200	1050	-	-	-	4DIM	10...100	>0,98	93	<10	<5	IP 20	150	90	40	
OT 165/170-240/1A0 4DIM LT2 G2	Outdoor	220	240	26	165	130	260	200	1050	-	-	-	4DIM	10...100	>0,99	93,5	<5	<5	IP 20	170	100	40	
IT DALI 20/220-240/1A0 E	Outdoor	220	240	6	20	15	29	350	1050	-	-	-	DALI	10...100	>0,95	84	<10	<5	IP 20	103	67	30	
IT DALI 40/220-240/1A0 E	Outdoor	220	240	11	40	29	57	350	1050	-	-	-	DALI	10...100	>0,95	86	<10	<5	IP 20	103	67	30	
IT DALI 75/220-240/1A0 E	Outdoor	220	240	20	75	55	107	350	1050	-	-	-	DALI	10...100	>0,95	92	<10	<5	IP 20	111	67	33	
IT DALI 110/220-240/1A0 E	Outdoor	220	240	27	110	75	157	350	1050	-	-	-	DALI	10...100	>0,95	92,5	<10	<5	IP 20	133	77	40	
IT DALI 150/220-240/1A0 E	Outdoor	220	240	39	150	110	214	350	1050	-	-	-	DALI	10...100	>0,95	92,5	<10	<5	IP 20	150	90	40	
IT DALI 20/220-240/1A0 P7	Outdoor	120	240	5,3	20	15	29	350	1050	-	-	-	DALI	10...100	>0,95	86	<10	<5	IP 67	138	82,5	38	
IT DALI 40/220-240/1A0 P7	Outdoor	120	240	10	40	29	57	350	1050	-	-	-	DALI	10...100	>0,95	90	<10	<5	IP 67	138	82,5	38	
IT DALI 75/220-240/1A0 P7	Outdoor	120	240	19,5	75	55	108	350	1050	-	-	-	DALI	10...100	>0,95	92	<10	<5	IP 67	167	61,5	39,5	
IT DALI 110/220-240/1A0 P7	Outdoor	120	240	26	110	75	157	350	1050	-	-	-	DALI	10...100	>0,95	93	<10	<5	IP 67	176	61,5	39,5	
IT DALI 150/220-240/1A0 P7	Outdoor	120	240	39	150	110	214	350	1050	-	-	-	DALI	10...100	>0,95	93	<10	<5	IP 67	184	61,5	39,5	
IT DALI 200/220-240/1A0 P7	Outdoor	120	240	51	200	145	286	350	1050	-	-	-	DALI	10...100	>0,95	92	<10	<5	IP 67	226	61,5	39,5	
OT 50/120...277/800 2DIMLT2 P	Outdoor	120	277	10,5	50	30	115	350	800	-	-	-	2DIM	30...100	>0,95	86	<15	<30	IP 64	168	50	30	

Description	Housing Type"	Input Voltage [V]		Power [W]		Output Voltage [V]		Output Current [mA]				DIM	Dimming Range	Power Factor	Efficiency	THD	Ripple	IP Protection	Dimensions				
		Min	Max	Min	Max	Min	Max	1	2	3	4								DIM	[%]	[A]	[%]	[%]
MODEL	Type	Min	Max	Min	Max	Min	Max	Min	Max	1	2	3	4	DIM	[%]	[A]	[%]	IP	L [mm]	W[mm]	H[mm]		
OT 50/120...277/1A2 2DIMLT2 P	Outdoor	120	277	12	50	20	55	600	1250	-	-	-	-	2DIM	30...100	>0,95	86	<15	<30	IP 64	168	50	30
OT 100/120...277/800 2DIMLT2 P	Outdoor	120	277	45	100	50	186	350	800	-	-	-	-	2DIM	30...100	>0,95	90	<15	<25	IP 64	168	68	38
OT 110/120...277/1A4 2DIMLT2 P	Outdoor	120	277	45	110	35	85	600	1400	-	-	-	-	2DIM	30...100	>0,95	90	<15	<25	IP 64	168	68	38
OT 100 UNV 1A0 2DIM P7	Outdoor	120	277	38	100	75	150	500	1050	-	-	-	-	2DIM	10...100	>0,95	92	<10	<10	IP 67	153,6	68	37
OT 150 UNV 1A0 2DIM P7	Outdoor	120	277	57	150	107	214	520	1050	-	-	-	-	2DIM	10...100	>0,95	92	<10	<10	IP 67	173,6	68	37
OT 200 UNV 1A0 2DIM P7	Outdoor	120	277	72	200	143	286	520	1050	-	-	-	-	2DIM	10...100	>0,95	92	<10	<10	IP 67	193,6	68	39
OT 320 UNV 1A1 2DIM P7	Outdoor	120	277	130	320	228	457	520	1100	-	-	-	-	2DIM	10...100	>0,95	92	<10	<10	IP 67	231	98	42
OT 100/220-240/1A4 2DIM P7	Outdoor	220	240	10	100	72	144	700	1400	-	-	-	-	2DIM	tbd	>0,98	91	<10	<5	IP 67	164,4	68,5	39,6
OT 150/220-240/1A4 2DIM P7	Outdoor	220	240	15	150	107	214	700	1400	-	-	-	-	2DIM	tbd	>0,98	92	<10	<5	IP 67	203,4	68,5	39,6
OT 200/220-240/1A4 2DIM P7	Outdoor	220	240	20	200	143	286	700	1400	-	-	-	-	2DIM	tbd	>0,98	92	<10	<5	IP 67	228,4	68,5	39,6
OT 240/220-240/1A0 2DIM P7 YENIDATASHEET	Outdoor	220	240	24	240	228	343	700	1050	-	-	-	-	2DIM	tbd	>0,98	93,5	<10	<25	IP 67	252,4	68,5	39,6
OT 100/220-240/2A8 DIM P7	Outdoor	220	240	10	100	27	48	2000	2800	-	-	-	-	1DIM	10...100	>0,95	90,5	<10	<5	IP 67	167	60	35
OT 150/220-240/4A2 DIM P7	Outdoor	220	240	15	150	27	48	3100	4200	-	-	-	-	1DIM	10...100	>0,95	93,5	<10	<5	IP 67	188	60	35
OT 200/220-240/5A6 DIM P7	Outdoor	220	240	20	200	27	54	4100	5600	-	-	-	-	1DIM	10...100	>0,95	93,5	<10	<5	IP 67	213	60	35
OT 20/170-240/1A0 1DIM LT2 G1 CE	Outdoor	220	240	2	22	10	38	200	1050	-	-	-	-	1DIM	10...100	>0,95	87	<10	<5	IP 20	123	79	33
OT 40/170-240/1A0 1DIM LT2 G1 CE	Outdoor	220	240	3	40	15	56	200	1050	-	-	-	-	1DIM	10...100	>0,95	90	<10	<5	IP 20	123	79	33
OT 75/170-240/1A0 1DIM LT2 G1 CE	Outdoor	220	240	7	75	35	115	200	1050	-	-	-	-	1DIM	10...100	>0,98	93	<5	<6	IP 20	133	77	40
OT 110/170-240/1A0 1DIM LT2 G1 CE	Outdoor	220	240	16	110	80	220	200	1050	-	-	-	-	1DIM	10...100	>0,98	93	<5	<5	IP 20	150	90	40
OT 75/220-240/1A0 1DIM G2 CE	Outdoor	220	240	tbd	75	35	115	200	1050	-	-	-	-	1DIM	10...100	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
OT 165/220-240/1A0 1DIM G2 CE	Outdoor	220	240	tbd	165	130	260	200	1050	-	-	-	-	1DIM	10...100	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
OT 60/220-240/1A4 1DIM A P7	Outdoor	220	240	30	60	43	86	700	1400	-	-	-	-	1DIM	25...100	>0,97	88	<10	<5	IP 67	138	82	37
OT 100/220-240/1A4 1DIM A P7	Outdoor	220	240	50	100	72	144	700	1400	-	-	-	-	1DIM	25...100	>0,95	90,5	<10	<5	IP 67	212	68,5	37
OT 150/220-240/1A4 1DIM A P7	Outdoor	220	240	75	150	107	214	700	1400	-	-	-	-	1DIM	25...100	>0,97	92	<10	<5	IP 67	212	68,5	37
OT 200/220-240/1A4 1DIM A P7	Outdoor	220	240	100	200	143	286	700	1400	-	-	-	-	1DIM	25...100	>0,98	93	<10	<5	IP 67	227,5	68,5	37
OT 100/220-240/700 P7	Outdoor	220	240	75	100	100	143	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	91,5	<5	<10	IP 67	167	60	33
OT 100/220-240/1050 P7	Outdoor	220	240	75	100	67	95,5	-	-	-	1050	-	-	Hayirr/No	n/a	>0,95	90,5	<5	<10	IP 67	167	60	33
OT 150/220-240/700 P7	Outdoor	220	240	100	150	150	215	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	94	<5	<10	IP 67	167	60	33
OT 150/220-240/1050 P7	Outdoor	220	240	100	150	100	143	-	-	-	1050	-	-	Hayirr/No	n/a	>0,95	93,5	<5	<10	IP 67	167	60	33
OT 200/220-240/700 P7	Outdoor	220	240	140	200	200	285	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	94	<5	<10	IP 67	188	60	33
OT 200/220-240/1050 P7	Outdoor	220	240	140	200	133	190	-	-	-	1050	-	-	Hayirr/No	n/a	>0,95	94	<8	<10	IP 67	188	60	33
OT 50/120...277/700 P5	Outdoor	120	277	16,8	50	24	74	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	87	<10	-	IP 65	168	50	30
OT 100/120...277/700 P5	Outdoor	120	277	38,5	100	55	152	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	90	<10	-	IP 65	168	60	39
OT 180/120...277/700 P5	Outdoor	120	277	80,5	180	115	257	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	90	<10	-	IP 65	251	60	39
OT 250/120...277/700 P5	Outdoor	120	277	126	250	180	357	-	-	-	700	-	-	Hayirr/No	n/a	>0,95	92	<10	-	IP 65	267	89	55
OT 100/220-240/4A2 P5	Outdoor	220	240	24	100	24	48	2100	4200	-	-	-	-	Hayirr/No	n/a	>0,98	88	<10	<25	IP 65	212,5	70	43,5
OT 150/220-240/4A9 P5	Outdoor	220	240	60	150	30	60	2450	4900	-	-	-	-	Hayirr/No	n/a	>0,98	90	<10	<25	IP 65	242,5	70	43,5
OT 200/220-240/5A6 P5	Outdoor	220	240	70	200	35	70	2800	5600	-	-	-	-	Hayirr/No	n/a	>0,98	91	<10	<25	IP 65	252,5	70	43,5

LIFUD LED DRIVER

LF-GIRxxxYS/YS(B) Series

- Constant Current Indoor Lighting LED Driver
- Mini size: It's measured to be 2.435cm thick; It may be the smallest LED driver compared to similar products in the market.
- It can drive a high power LED of 3V2A. Driving current of 1.8A/1.5A/1.2A. It's designed for precise lighting with high brightness and small angle.
- Added certification for external assembly, which filled the gap of the market.
- Use double-sided PCB process to improve reliability.
- The design of the casing balances aesthetics and practicality.
- It has not any "ear" on either end.
The design of the casing balances aesthetics and practicality.
- Certification icons are on the bottom casing.
- The LF-GIRxxxYS is for external assembly and the LF-GIRxxxYS(B), built-in assembly.
- Flicker free
- Certificate: CE, CB, RCM, CCC



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GIR003YS/YS(B)	3	220..240	5..10	300	70% (230 Vac)	0.4 (230 Vac)	39*19*17mm
LF-GIR003YS/YS(B)	1.2..3	220..240	2..4	300/350/600/700	65% (230 Vac)	0.43 (230 Vac)	39*19*17mm
LF-GIR007YS/YS(B)	4..7	220..240	5..10	350/500/600/700	74% (230 Vac)	0.45 (230 Vac)	49*24*21mm
LF-GIR007YS/YS(B)	6..7	220..240	30..40	135/160/180	81% (230 Vac)	0.47 (230 Vac)	49*24*21mm
LF-GIR008YS/YS(B)	5..8	220..240	2..4	1200/1500/1800	71% (230 Vac)	0.45 (230 Vac)	49*24*21mm

LF-GIRxxxYS/YS(B) Series

- Constant Current Indoor Lighting LED Driver
- Flicker free; PF≥0.5
- Screw-free design greatly saves labor cost
- Suitable for Class II light fixtures
- Application Areas: LED down light, ceiling light, round panel light etc.
- Certification: CE, CB, TUV, RCM, CCC
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GIR009YS	6..8	220..240	25..42	135 / 160 / 180 / 200	80% (230 Vac)	0,50 (230 Vac)	96*36*24mm
	7..8	220..240	14..24	300 / 350	76% (230 Vac)	0,50 (230 Vac)	96*36*24mm
	6..8	220..240	8..11	500 / 600 / 700	76% (230 Vac)	0,50 (230 Vac)	96*36*24mm
LF-GIR013YS	9..13	220..240	25..42	220 / 250 / 300	80% (230 Vac)	0,50 (230 Vac)	96*36*24mm
	13	220..240	25..38	350	81% (230 Vac)	0,50 (230 Vac)	96*36*24mm
LF-GIR024YS	17..23	220..240	25..42	400 / 450 / 500 / 550	87%(230Vac)	0,50 (230 Vac)	96*36*24mm
	23	220..240	25..39	600	87%(230Vac)	0,50 (230 Vac)	96*36*24mm

LIFUD LED DRIVER

LF-GIRxxxYA/YS Series

- Constant Current Indoor Lighting LED Driver
- High efficiency up to 90%
- Low THD less than 20%
- Flicker free, modulation depth<0.5%
- Suitable for Class I light fixtures
- Application Areas: Decoration lighting, Indoor office lighting,
- Commercial lighting, Residential lighting
- Certificate: CB,ENEC,CE,RCM,CCC,SAA
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GIF015YA	4..14	220..240	25..40	100 / 150 / 180 / 200 / 250 / 300 / 350	82% (230 Vac)	0,90 (230 Vac)	96*36*24mm
LF-GIF022YA	16..20	220..240	25..40	400 / 450 / 500	85% (230 Vac)	0,90 (230 Vac)	115*41*28mm
LF-GIF030YS	22..30	220..240	33..40	550 / 600 / 650 / 700 / 750	87% (230Vac)	0,90 (230Vac)	115*41*28mm
LF-GIF040YS	32..42	220..240	33..40	800 / 850 / 900 / 950 / 1000 / 1050	88% (230Vac)	0,95 (230Vac)	115*41*28mm
LF-GIF050YA (H)	44..52	220..240	33..40	1100 / 1150 / 1200 / 1250 / 1300	90% (230 Vac)	0,95 (230 Vac)	139,5*43*29mm
LF-GIF050YA (L)	36..43	220..240	25..33	1100 / 1150 / 1200 / 1250 / 1300	90% (230 Vac)	0,95 (230 Vac)	139,5*43*29mm
LF-GIF060YA (H)	60..62	220..240	33..40	1350 / 1400 / 1450 / 1500 / 1550	90% (230 Vac)	0,95 (230 Vac)	139,5*43*29mm
LF-GIF060YA (L)	50..51	220..240	25..33	1350 / 1400 / 1450 / 1500 / 1550	90% (230 Vac)	0,95 (230 Vac)	139,5*43*29mm

LF-AADxxx Series

- Constant Current Indoor Lighting LED Driver
- DALI + Push dimming
- Consistent luminance,current tolerance no more than 3% in different batches
- Output current adjustable via the DIP switch (50mA a step)
- Smooth dimming, optional logarithmic or linear dimming curve
- Flicker free, percent flicker less than 1%
- Dimming range: 0%-100%; dimming depth: 0.1%
- Suitable for Class II light fixtures
- Application Areas: Plant lighting, indoor office lighting, decorative lighting, commercial lighting, residential lighting
- Certification: DALI-2, ENEC, CE, CB, RCM, CCC
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-AAD008-0350-42	8	220..240	9..42	100-150-200-250-300-350	76% (230Vac)	0,90 (230Vac)	142*29*20,5mm
LF-AAD008-0700-12	8	220..240	2..12	350-400-450-500-550-600-650-700	76% (230Vac)	0,90 (230Vac)	142*29*20,5mm
LF-AAD012-0400-42	12	220..240	9..42	150-200-250-300-350-400	82% (230Vac)	0,90 (230Vac)	122*40*25mm
LF-AAD020-0500-42	20	220..240	9..42	250-300-350-400-450-500	85% (230Vac)	0,95 (230Vac)	122*40*25mm
LF-AAD030-0750-42	30	220..240	9..42	400-450-500-550-600-650-700-750	85% (230Vac)	0,95 (230Vac)	141*46*27mm
LF-AAD040-1050-42	40	220..240	9..42	550-600-650-700-750-800-850-900-950-1000-1050	87% (230Vac)	0,95 (230Vac)	141*46*27mm

LIFUD LED DRIVER

LF-GSDxxxYE Series

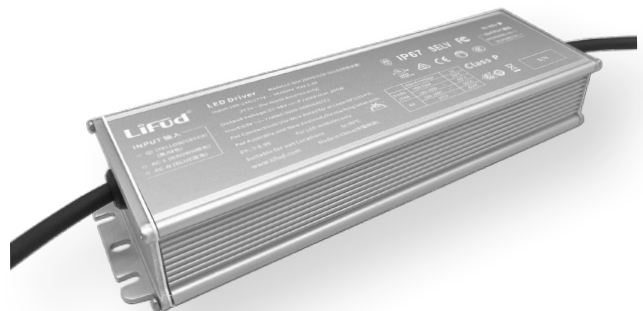
- Constant Current Indoor Lighting LED Driver
- DALI & push dimming functions in one
- DIP switch: adjustable output current helps you to minimize the SKU
- Suitable for external or built-in assembly (with or without terminal covers)
- Flicker-free dimming; percent flicker <0.5%
- Logarithmic or linear dimming curve can be selected via the DALI interface
- Application Areas: LED grille light, linear light, tri-proof light, etc.
- Certification: DALI 2.0, ENEC, CE, CB, RCM, CCC
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GSD015YE	4..14	220..240	25..42	100-150-200-250-300-350	84.5% (230Vac)	0,90 (230Vac)	195*30*21mm
LF-GSD020YE	8..21	220..240	25..42	250-300-350-400-450-500	87% (230Vac)	0,90 (230Vac)	245*30*21mm
LF-GSD030YE	23..34	220..240	25..42	550-600-650-700-750	87% (230Vac)	0,90 (230Vac)	245*30*21mm
LF-GSD040YE	34..44	220..240	25..42	800-850-900-950-1000-1050	88% (230Vac)	0,90 (230Vac)	245*30*21mm
LF-GSD060YE	46..63	220..240	25..42	1100-1150-1200-1250-1300-1350-1400-1450-1500	89% (230Vac)	0,90 (230Vac)	285*30*21mm
LF-GSD080YE	65..84	220..240	25..42	1550-1600-1650-1700-1750-1800-1850-1900-1950 - 2000	89% (230Vac)	0,90 (230Vac)	355*30*21mm

LF-GOExxxYE/YF Series

- Constant Current Outdoor Lighting LED Driver
- 3-in-1 dimming: 0-10V/PWM/Rx (For YF models)
- High efficiency up to 94.5%
- Two-stage flicker free
- Output current adjustable via the potentiometer
- Surge protection: 6KV/10KV (standard and enhanced version optional)
- IP67
- Application Areas: Street lighting, tunnel lighting, horticulture lighting, landscape lighting
- Certification: ENEC, CE, CB, RCM, CCC, FCC, UL
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GOE110YE/YF	110	100..277	27..56	1500..3000	91% (230 Vac)	0,95 (230 Vac)	190*69*36mm
LF-GOE150YE/YF	150	100..277	27..56	1800..4200	92% (230 Vac)	0,95 (230 Vac)	190*69*36mm
LF-GOE200YE/YF	200	100..277	27..56	3000..5500	93,5% (230 Vac)	0,95 (230 Vac)	227*69*36mm
LF-GOE240YE/YF	240	100..277	27..56	3500..6700	93,5% (230 Vac)	0,95 (230 Vac)	227*69*36mm
LF-GOE320YE/YF	320	100..277	27..56	4000..8900	94,5% (230 Vac)	0,95 (230 Vac)	254*87*40mm

LIFUD LED DRIVER

LF-GMRxxxYV Series

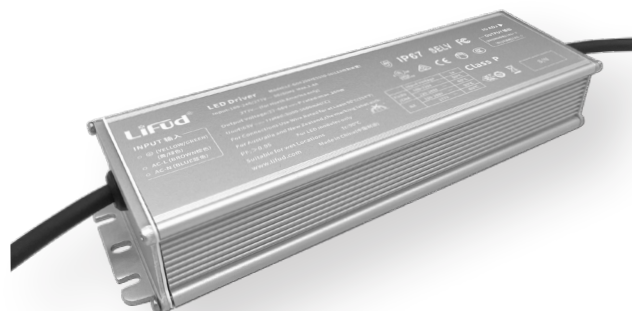
- LF-GMRxxxYV Series
- Flicker free
- Slim size makes installation easier
- Optional: external or built-in assembly (with or without terminal covers)
- Long lifetime
- Application Areas: LED strip light, advertising light box, etc.
- Certification: CE, RCM, CCC
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GMR030YV024A	30	220..240	24	0..1,25	87%(230Vac)	0,97(230Vac)	245*30*21mm
LF-GMR045YV012A	45	220..240	12	0..3,75	88%(230Vac)	0,97(230Vac)	245*30*21mm
LF-GMR045YV024A	45	220..240	24	0..1,875	88%(230Vac)	0,97(230Vac)	245*30*21mm
LF-GMR060YV024A	60	220..240	24	0..2,5	88.5%(230Vac)	0,97(230Vac)	285*30*21mm
LF-GMR075YV012A	75	220..240	12	0..6,25	88.5%(230Vac)	0,97(230Vac)	285*30*21mm
LF-GMR075YV024A	75	220..240	24	0..3,125	88.5%(230Vac)	0,97(230Vac)	285*30*21mm

LF-GOExxxYV Series

- Constant Voltage Outdoor Lighting LED Driver
- Flicker free
- High efficiency up to 93%
- The potentiometer makes it easier to adjust output voltage
- Surge protection: L-N: 6KV, L/N-PG: 8KV
- IP67
- Application Areas: Outdoor lighting, landscape/building lighting, LED lightbox, etc.
- Certification: ENEC, CE, CB, UL, FCC, RCM
- 5 Years Warranty



Model	Power (Watt)	Vin	Vout	I (mA)	Efficiency	Power Factor	Dimension (L*W*H)
LF-GOE075YV012A	60	100..180	12	0,24..5,0	86%(180Vac)	92%-108%	170*61*34mm
LF-GOE075YV012A	75	220..277	12	0,24..6,25	87%(230Vac)	92%-108%	170*61*34mm
LF-GOE075YV024A	60	100..180	24	0,24..2,5	87%(180Vac)	92%-108%	170*61*34mm
LF-GOE075YV024A	75	220..277	24	0,24..3,125	88%(230Vac)	92%-108%	170*61*34mm
LF-GOE100YV012A	75	100..180	12	0,24..6,25	87%(180Vac)	92%-108%	170*61*34mm
LF-GOE100YV012A	100	220..277	12	0,4..8,34	89%(230Vac)	92%-108%	170*61*34mm
LF-GOE100YV024A	75	100..180	24	0,24..3,125	87%(180Vac)	92%-108%	170*61*34mm
LF-GOE100YV024A	100	220..277	24	0,24..4,17	89%(230Vac)	92%-108%	170*61*34mm
LF-GOE150YV012A	100	100..180	12	0,4..8,34	88%(180Vac)	92%-108%	170*61*34mm
LF-GOE150YV012A	150	220..277	12	0,4..11,5	93%(230Vac)	92%-108%	170*61*34mm
LF-GOE150YV024A	100	100..180	24	0,24..4,17	88%(180Vac)	92%-108%	170*61*34mm
LF-GOE150YV024A	150	220..277	24	0,4..6,25	93%(230Vac)	92%-108%	170*61*34mm
LF-GOE200YV012A	150	100..180	12	0,4..12,5	88%(180Vac)	92%-108%	228*63*34mm
LF-GOE200YV012A	200	220..277	12	0,4..16,67	93%(230Vac)	92%-108%	228*63*34mm
LF-GOE200YV024A	150	100..180	24	0,4..6,25	88%(180Vac)	92%-108%	228*63*34mm
LF-GOE200YV024A	200	220..277	24	0,4..8,34	93%(230Vac)	92%-108%	228*63*34mm
LF-GOE250YV024A	200	100..180	24	0,4..8,34	88%(180Vac)	92%-108%	228*63*34mm
LF-GOE250YV024A	250	220..277	24	0,4..10,42	93%(230Vac)	92%-108%	228*63*34mm

Blank lined paper for writing.



LED Modules

Led Lighting **LED LENS**

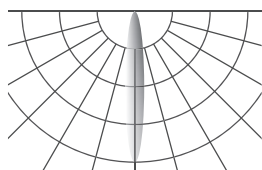
We reserve the right to change dimensions.



PRECISE LIGHT MANAGEMENT with a Range of Distribution Characteristics

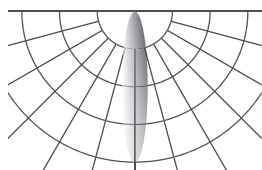
Dimensions and Material

Width	23mm - 43mm
Thickness	PMMA (1.5 - 2 mm), PC Film (0.125 - 0.500 mm)
Length	up to 1400 mm
Nominal Distance to LED	10 mm
Material	PMMA, PC Film



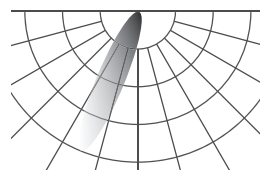
Nilo 1

Beam Type	Deep
Beam Width	14°
Peak Angle	0°
Peak Intensity	1.2 cd/lm
Efficiency	95 %



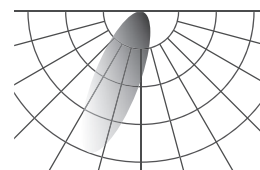
Nilo 2

Beam Type	Deep
Beam Width	19°
Peak Angle	0°
Peak Intensity	1.0 cd/lm
Efficiency	94%



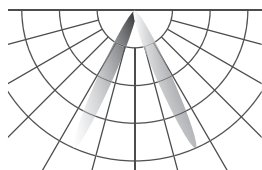
Darlo 1

Beam Type	Asymmetric
Beam Width	21°
Peak Angle	20°
Peak Intensity	0.9 cd/lm
Efficiency	95%



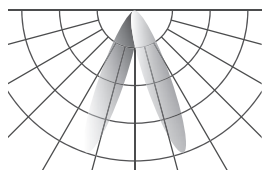
Darlo 2

Beam Type	Asymmetric
Beam Width	49°
Peak Angle	20°
Peak Intensity	0.6 cd/lm
Efficiency	95%



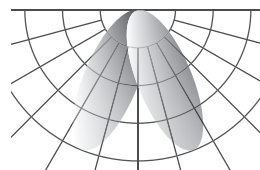
Elbo 1

Beam Type	Double-Asymmetric
Beam Width	57° / 11°
Peak Angle	-25° / +25°
Peak Intensity	1.1 cd/lm
Efficiency	95%



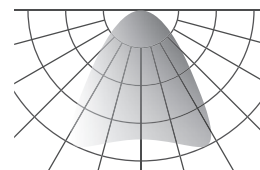
Elbo 2

Beam Type	Double-Asymmetric
Beam Width	54° / 17°
Peak Angle	-20° / +20°
Peak Intensity	0.8 cd/lm
Efficiency	96%



Elbo 3

Beam Type	Double-Asymmetric
Beam Width	76° / 38°
Peak Angle	-20° / +20°
Peak Intensity	0.5 cd/lm
Efficiency	96%



Nubo 1

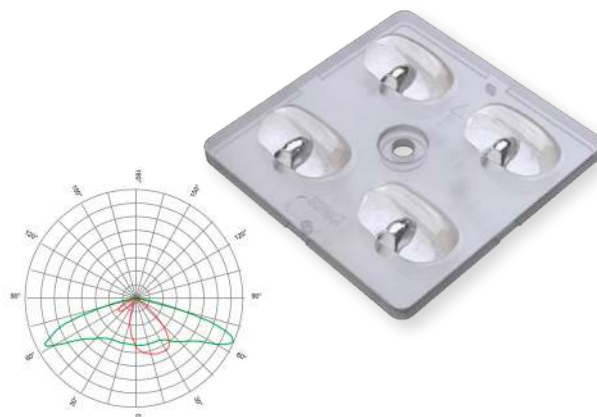
Beam Type	Medium Wide
Beam Width	80°
Peak Angle	-26° / +26°
Peak Intensity	0.4 cd/lm
Efficiency	96%



KHATOD LENSES

NACTUS SMALL OPTICAL SYSTEM WITH 4 LENSES KNAC0406ASM

- Dimensions: 50mm x 50mm side – Height: 7,21mm – Lens pitch: 25,40mm
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Asymmetric: 158° x 110°
- IES TYPE (IESNA Distribution Type): II
- Category (Road Lighting Class): ME3A
- Application Area: Outdoor Lighting (Street Lighting, Park & Garden,Tunnel etc.)
- Compatible Led Modules
- REC-50x60-SQRx04-KNAC 2x2
- REC-134x230-SQRx20-KNAC 2x2
- Please check our led module catalog for specification of led modules



KNAC0420ASM

- Dimensions: 50mm x 50mm side – Height: 8,80 mm – Lens pitch: 25,40mm
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Symmetric: 50°
- IES TYPE (IESNA Distribution Type): V
- Application Area: Outdoor Lighting (Street Lighting, Park & Garden, Tunnel etc.)
- Compatible Led Modules
- REC-50x60-SQRx04-KNAC 2x2
- REC-134x230-SQRx20-KNAC 2x2
- Please check our led module catalog for specification of led modules



NACTUS 2X3 LENSES KNAC06xxASM Series

- Dimensions: 50,00mm x 50,00mm side
- Material = PMMA 8N (Top: -40°...90°C)
- Application Area: Outdoor applications especially for Street Lighting applications.
- Optimized for most popular 5050 package LEDs without dome and totally compatible with 2x2 modules

Part Number	Angle
KNAC0601ASM	148°x104° IESNA Type II Medium Cut Off
KNAC0602ASM	144°x62° IESNA Type II Medium Cut Off
KNAC0603ASM	142° x 58° Asymmetrical



Nactus 8 Lenses KNAC08xxASM Series

Lens Code	Beam Angles
SAR1A	149° X 95°
PLL120001TR	15°
PLL120002TR	34°
PLL120001	60°
PLL120002	90°



KHATOD LENSES

KHATOD VENUS LENSES

VENUS is the new family of linear optics, made by Khatod

Made of optical grade PMMA, these lenses work perfectly within -40° to +90°C temperature range.

Arranged in modules of 3 optics each, adjustable in size thanks to thinner interruption points each module.

Pitch: 24.58mm, dimensions: 295.05mm x 16.04mm side, 9.50mm height.

High lighting efficiency and excellent light distribution guaranteed.

VENUS can be used individually or configured in multiple parts to create the perfect lighting fixture to meet the required standards.

Lens Code	Beam Angles
Venus NA	15°
Venus ME	20°
Venus EL	Elliptical



NACTUS 2X6 LENSES PLL120001 60°

- Dimensions: 173,00mm x 71,40mm side – Height: 11,52mm – Lens pitch: 25,40mm
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Symmetric: 60°
- Meet EN13201, IESNA and EN62471:2010
- Application Area: Outdoor Lighting (Street Lighting, Park & Garden, Tunnel etc.)
- Silicone gasket code: KGAS12
- IP65

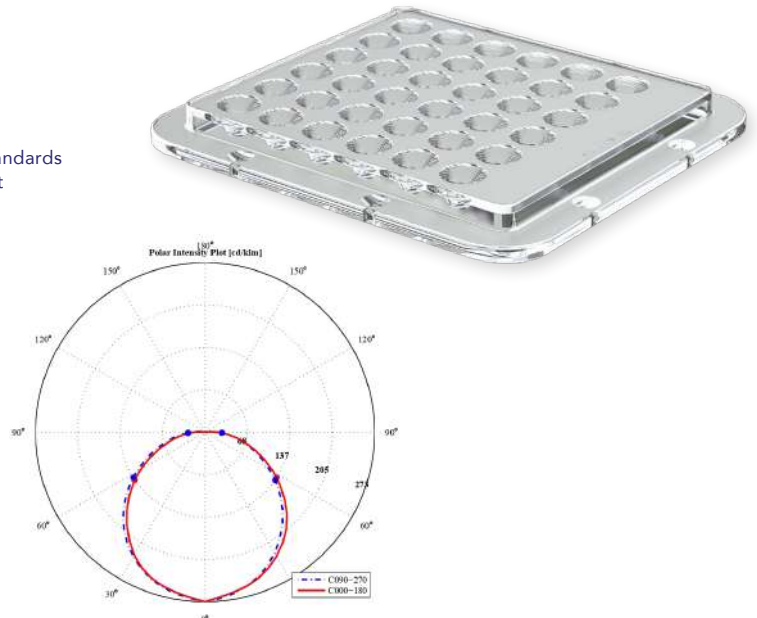
- Compatible Led Modules
- REC-145x43-SQRx12
- Please check our led module catalog for specification of led modules



NEMA SERIES

- Dimensions: 110,00mm x 120,00mm side – Height: 9,51mm
- Material = PMMA HT(Top: -30°...110°C), Non-yellowing
- Outstanding light quality, anti-glare, meet NEMA 2-3-4-5-7 standards
- Engineered for arena/stadium/event lighting, are also excellent for road and urban Works.
- Silicon gasket code: KGAS04
- Designed to comply with IK08 and IP65

Part Number	Number of Optics	Angle
PL1758NA	36	14,5°
PL1758ME	36	18°
PL1758WI	36	28°
PL1758EW	36	45°
PL1758CV	36	111°
PL1758EL	36	15°x40°

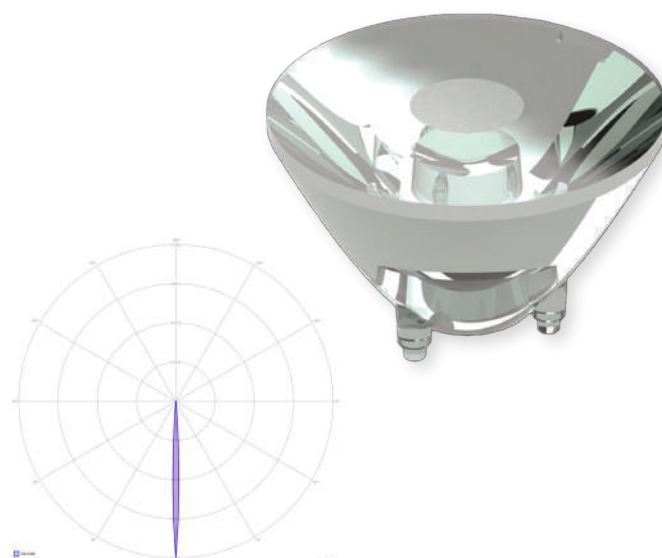


KHATOD LENSES

ULTRA NARROW BEAM LENS // 3,5° LENS PL1672UN

- Dimensions: 35,00mm diameter – Height: 20,71mm – MR11 Standard
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Clean Spot, Efficiency>89%
- 3 Pins provided for precise and robust mounting
- Available in 35mm, 46,8mm and 50mm diameter
- Application Area: Military Lighting, Architectural Lighting, Track Lighting, Medical Lighting

- Compatible Led Modules
- REC-400x80-SQRx20
- Please check our led module catalog for specification of led modules



STOCK & SHOP SERIES 11x3 Stock & Shop

- Dimensions: 286,00mm x 60,00mm side – Height: 7,80mm
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Designed for any Lighting System using Mid-Power LEDs.
- 11x3 optics panels
- Excellent optical solutions for lighting systems used in rooms with high ceilings and industrial frame.
- Ensure high efficiency and energy saving.
- Lighting efficiency: over 85%
- Easily replace conventional lighting in existing light fixtures.
- Engineered for arena/stadium/event lighting, are also excellent for road and urban Works.

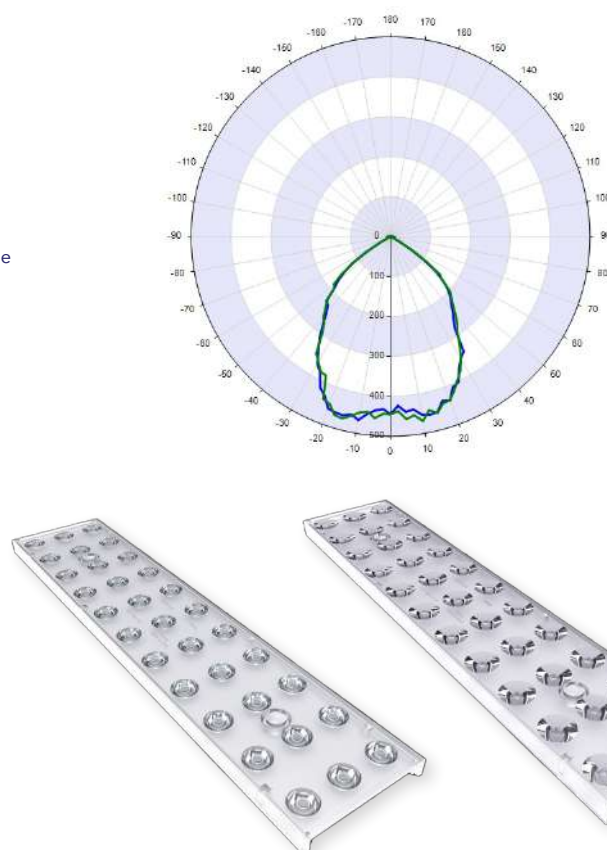
Part Number	Number of Optics	Angle
PLL2059WIKH	33	30°
PLL2059EWKH	33	60°
PLL2059UWKH	33	90°
PLL2059AXKH	33	90° Double Asymmetric



11x3 Stock & Shop, Box - Shape

- Dimensions: 285,60mm x 61,00mm side – Height: 12,50mm, box-shape
- Material = PMMA 8N(Top: -40°...90°C), Non-yellowing, 10-year guarantee
- Designed for any Lighting System using Mid-Power LEDs.
- 11x3 optics panels
- Box-shape design; more compact, robust, efficient while enabling the housing to be extremely flat.
- Excellent optical solutions for lighting systems used in rooms with high ceilings and industrial frame.
- Ensure high efficiency and energy saving.
- Lighting efficiency: over 85%
- Engineered for arena/stadium/event lighting, are also excellent for road and urban Works.

Part Number	Number of Optics	Angle
PLL2061WIKH	33	30°
PLL2061EWKH	33	60°
PLL2061UWKH	33	90°
PLL2061AXKH	33	90° Double Asymmetric



DARKOO LENSES

DK5050-12H1 4X3 LENSES

- Dimensions: 50,00mm x 50,00mm side
- Material = PC (Top: -40°...80°C)
- Application Area: Outdoor Lighting
(Street Lighting, Park & Garden, High Bay, Tunnel etc.)

Part Number	Number of Optics	Angle
DK5050-12H1-30	12	30° Symmetric
DK5050-12H1-60	12	60° Symmetric
DK5050-12H1-90X90	12	90° Symmetric
DK5050-12H1-150X75-TII-S	12	150°x75° Asymmetric



DK173-36H1 36 LENSES

- Dimensions: 173,00mm x 71,40mm side
- Material = PMMA
- IP65 (With Silicon Gasket)
- Application Area: Outdoor Lighting
(Street Lighting, Park & Garden, High Bay, Tunnel etc.)

Part Number	Number of Optics	Angle
DK-173-30-TP-36H1	36	30° Symmetric
DK-173-60-TP-36H1	36	60° Symmetric
DK-173-90-TP-36H1	36	90° Symmetric
DK-173-157x90-TP-S-H-36H1	36	157°x90° Asymmetric



DK-122 5IN1 REFLECTOR

- Dimensions: 132,40mm x 29,60mm side
- Material = PC
- Application Area: Indoor Lighting, Spotlight
- Beam Angle Options: 12°, 34°, 48°



CONNECTORS

221-412

- 2x4mm²
- Compact Slipping Connector



221-413

- 3x4mm²
- Compact Slipping Connector



221-415

- 5x4mm²
- Compact Slipping Connector



294-5012

- Lighting & Power
- supply connector; without ground contact; with snap-in mounting feet; N-L; 2-pole



294-5013

- Lighting & Power
- supply connector; without ground contact; with snap-in mounting feet; N-PE-L; 3-pole



294-S413

- Lighting & Power
- supply connector; with saew-type ground contact; with snap-in mounting feet; N-PE-L; 3-pole



294-5035

- Lighting & Power
- supply connector; without ground contact; with snap-in mounting feet; DA+DA-L PE N; 5-POLE



294-5015

- Lighting & Power
- supply connector; without ground contact; with snap-in mounting feet; L3-L2-LI-PE-N; 5-pole



294-S415

- Lighting & Power
- supply connector; with saew-typeground contact; with snap-in mounting feet; L3-L2-LI-PE-N; 5-pole



2059-0301

- LED PCB Terminal Block SMD 1 Pole -0,5mm



2059-0302

- LED PCB Terminal Block SMD 2 Pole -0,5mm



2059-0303

- LED PCB Terminal Block SMD 3 Pole -0,5mm



2060-0451

- LED PCB Terminal Block SMD 1 Pole -0,75 mm - Push Button



2060-0452

- LED PCB Terminal Block SMD 2 Pole -0,75 mm - Push Button



2060-4053

- LED PCB Terminal Block SMD 3 Pole -0,75 mm - Push Button



2060-0951

- Board-to-Board Link 1-pole; Lenght: 28 mm



2060-0952

- Board-to-Board Link 2-pole; Lenght: 30 mm



2060-0953

- Board-to-Board Link 3-pole; Lenght: 30 mm



2065-100

- LED PCB Terminal Block SMD 1 pole; 0.75mm² Push-button



CERTIFICATES

- LED Light for You Certificates
- ISO 9001 Quality Management System Certificate
- Sarvioled
- ISO 14001:2015 Environmental Management System Certificate
- 2020 146939 Sarnikon Sarlite Registration Certificate
- TÜV Rheinland IATF 16949LOC



sarnikon

one stop shop
all in one hand



www.sarnikon.com

Head Office

Ferhatpaşa Mah.
14. Sok. No:12
Ataşehir • İstanbul
34888 Türkiye
Tel: +90 216 471 71 97
Fax: +90 216 471 71 66
info@sarnikon.com

Factory

Eyüp Sultan Mah.
İbni Sina Cad. No: 22
Sancaktepe • İstanbul
34885 Türkiye
+90 216 471 40 07