



LED LIGHTING



comet electronics

WHY LEDs



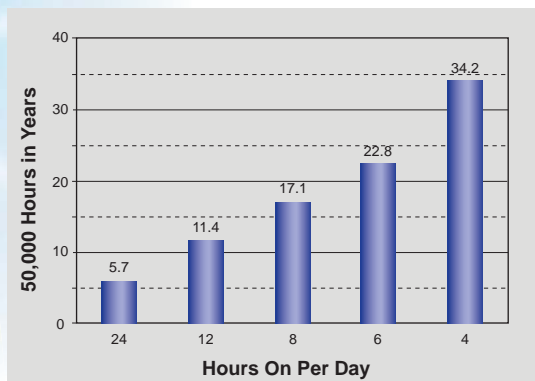
High efficiency light source

Long lifetime > 50 000 hrs

Energy saving, "GREEN" technology

High quality light - high Color Rendering Index

Easy dimming and great design flexibility

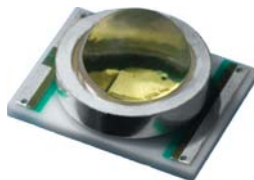
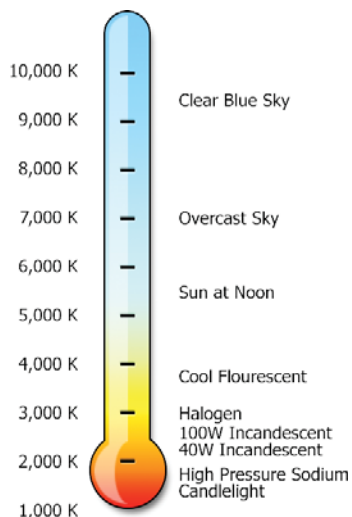


CREE High Power LEDs

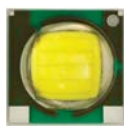
XLamp parameters							
Color	Wavelength (nm) or color temperature (K)		Standard Min. Flux @ 350 mA for the top bin of the series				
	Min.	Max.	Package 3.5 x 3.5mm			Package 7.0 x 9.0mm	
			XP-C Series ^{NEW}	XP-E Series ^{NEW}	XP-G Series ^{NEW}	MC-E White Series ^{NEW}	MC-E RGBW Series ^{NEW}
Cold white	5000K	10000K	100lm	100lm	139lm	430lm	95lm
Natural white	3700K	5000K	87.4lm	87.4lm	-	370lm	80lm
Warm white	2600K	3700K	73.9lm	80.6lm	-	320lm	-
Royal blue	450nm	465nm	-	-	-	-	-
Blue	465nm	485nm	-	30.6lm	-	-	8.2lm
Green	520nm	535nm	-	100lm	-	-	67.2lm
Amber	585nm	595nm	-	51.7lm	-	-	-
Red-orange	610nm	620nm	-	67.2lm	-	-	-
Red	620nm	635nm	-	51.7lm	-	-	30.6lm
Maximum forward current, I_{Fmax}	Blue, Green		0.5A	1A	1A	0.7A	0.7A
	Red-orange, Red, White			0.7A			
	Amber			0.5A			
Maximum forward voltage at $I_F=350mA$	Blue, Green, White		3.9V	3.9V	3.75V	3.9V	G, B, W - 3.9V R - 2.5V
	Red-orange, Red, Amber		-	2.5V			
Maximum reverse voltage, V			5.0V	5.0V	5.0V	5.0V	5.0V
Viewing angle			110 deg.	White 115° Color 130°	125°	110°	115°
Thermal resistance junction-to-package, °C/W	Blue, White		12°C/W	9°C/W	6°C/W	3°C/W	3°C/W
	Green			15°C/W			
	Red-orange, Red, Amber			10°C/W			
Maximum junction temperature, °C	Royal blue, Blue, Cyan, Green, White		150°C	150°C	150°C	150°C	150°C
	Red-orange, Red, Amber						



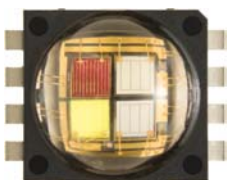
White color temperature



XLamp XR-E LED

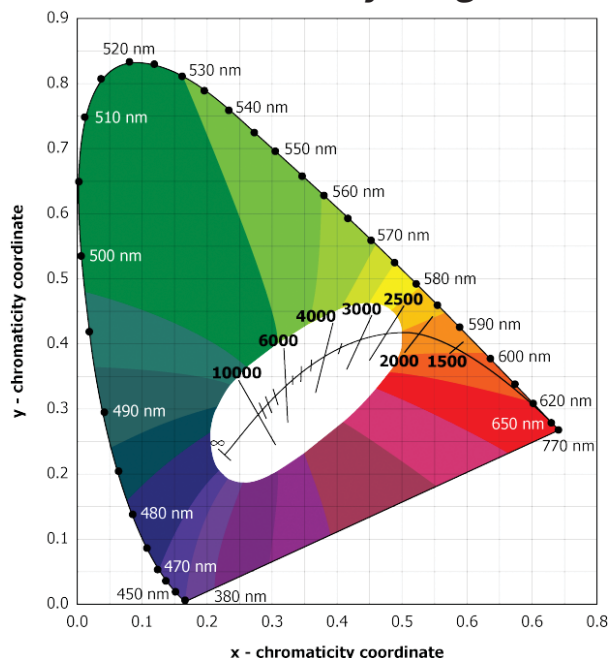


XLamp XP-E LED



XLamp MC-E LED

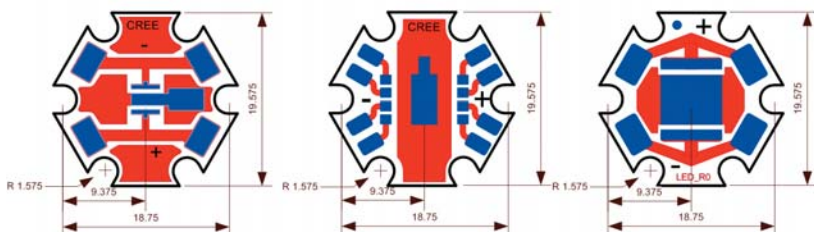
CIE Chromaticity diagram



ALPCB STAR XR

ALPCB STAR MCE

ALPCB STAR XP



Al Star PCBs with CREE LEDs

The Star PCBs can be populated with variety of CREE LEDs from XL, XR, XP and MCE series.

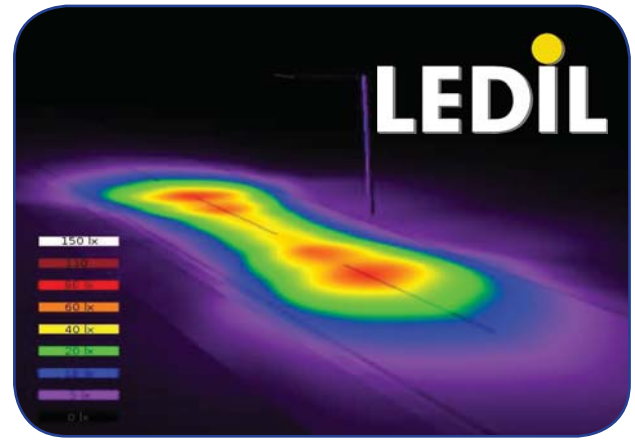
The World Leader in LED Technology!

High Quality LED Secondary Optics

STRADA lenses for street lighting



- Specially designed for CREE XP-E series of LEDs.
- New extremely wide street light design, batwing light distribution.
- Best available optical efficiency, 94% STRADA-A and 96% STRADA-B.
- Lens material - optical grade PMMA for long life. Allows use in high current and temperature conditions.
- Special care taken to make a uniform white or warm white illumination.
- Fastening to heat sink with screws or with PU foam adhesive tape of automotive grade.



LEDIL's Secondary Optics

PART NUMBER	DESCRIPTION	DIMENSIONS
OPT STRADA-B-XP-TAPE	Lense for CREE XPE, Batwing	W19.6 x L10.5 x H15.4mm
OPT STRADA-A-XP-TAPE	Lense for CREE XPE, Batwing	W19.6 x L10.5 x H15.4mm
OPT LXP-RS	Lense for CREE XPE, REAL SPOT $\pm 3^\circ$ (6°)	$\varnothing 21.6$, height 14.64mm
OPT LXP-D	Lense for CREE XPE, DIFF $\pm 5^\circ$ (10°)	$\varnothing 21.6$, height 14.64mm
OPT CXP-SS	Lense for CREE XPE, SMOOTH SPOT $\pm 6^\circ$ (12°)	W21.6xL21.6xH12mm
OPT LXP-M	Lense for CREE XPE, MEDIUM $\pm 13^\circ$ (26°)	$\varnothing 21.6$, height 14.64mm
OPT CXP-M	Lense for CREE XPE, MEDIUM $\pm 15^\circ$ (30°)	W21.6 x L21.6 x H12mm



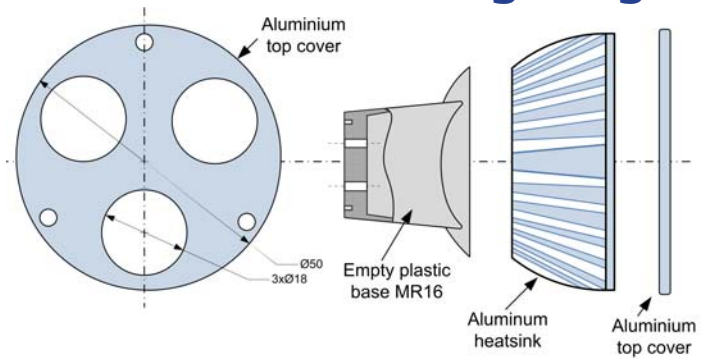
Aluminum Street Lamp and Bulb Kits for LED Lighting

Downlight and Bulb retrofit Kits for indoor LED lighting



LEDBHS10xx

Dimensions: $\varnothing 50\text{mm}$
B42.5, MR16 base
Max Power: 2W



LEDBHS1016

LEDBHS1019

LEDBHS1017

LEDBHS1020



LED Body Kit,
5x1W, $\varnothing 92$ H78,
E27 base



LED Body Kit,
6x1W, $\varnothing 77$ H79,
E27 base



LED Body Kit,
7x1W, $\varnothing 92$ H78,
E27 base

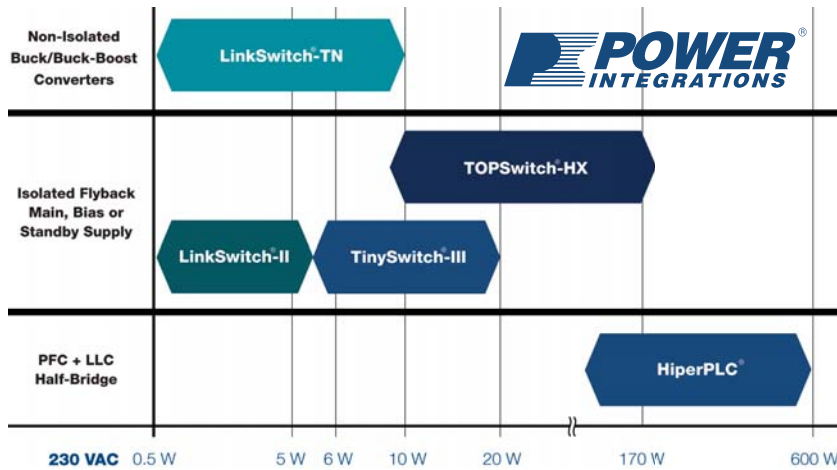


LED Body Kit,
12x1W, $\varnothing 122$
H138, E27 base

The Leader in LED Lighting Optics!

High quality drivers for LED Lighting

Power Integrations – leader in power conversion



DER-212 - 150 W Power Factor Corrected LLC Power Supply Using HiperPLC (PLC810PG)

- Input Voltage: 140 ÷ 265VAC Input
- Output Power: 150W
- Output Voltage: 48V
- Output Current: 0.05A ÷ 3.125A
- PFC: Single Stage.



LA1012



L85xW35xH23mm

LP1025



L78xW80xH25mm



Constant current LED Lighting PSUs

- Long life: MTBF @25°C > 100000 hours;
- UL1310, Class 2 compliant;
- Operating temperature: -40°C to +60°C;
- Power factor > 0.90;
- Protection: IP66;
- Suitable for damp locations;
- Compact, lightweight, UV rated plastic case.

LP1017



L210xW25xH22mm

LP1040

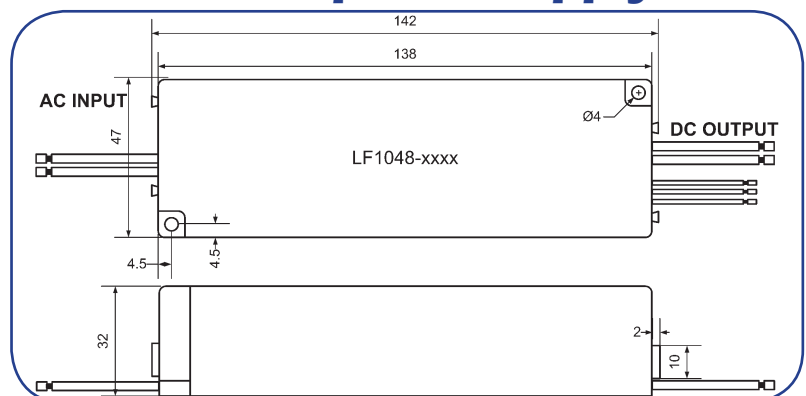


L95xW70xH32mm

Order code	Mode	Input voltage	Output current	Output voltage	PF
LA1012-36-C0350 n.20-3633	CC	100~240VAC	0.35A	5~36V	PF>0.6
LP1017-24-C0700 n.20-3625	CC	100~277VAC	0.7A	12~24V	PF>0.92
LP1025-24-C1040 n.20-3724	CC	100~277VAC	1.04A	12~24V	PF>0.92
LP1025-36-C0700 n.20-3715	CC	100~277VAC	0.7A	18~36V	PF>0.92
LP1040-24-C1400 n.20-3768	CC	100~277VAC	1.4A	12~24V	PF>0.90
LP1040-36-C1050 n.20-3788	CC	100~277VAC	1.05A	18~36V	PF>0.90
LF1048-36-C1400	CC	90~264VAC	1.4A	18~39.6V	PF>0.92
LF1048-48-C0700	CC	90~264VAC	0.7A	30~52.8V	PF>0.92
LF1048-88-C0700	CC	90~264VAC	0.7A	40~88V	PF>0.92

High voltage AC/DC 48W CV/CC LED power supply

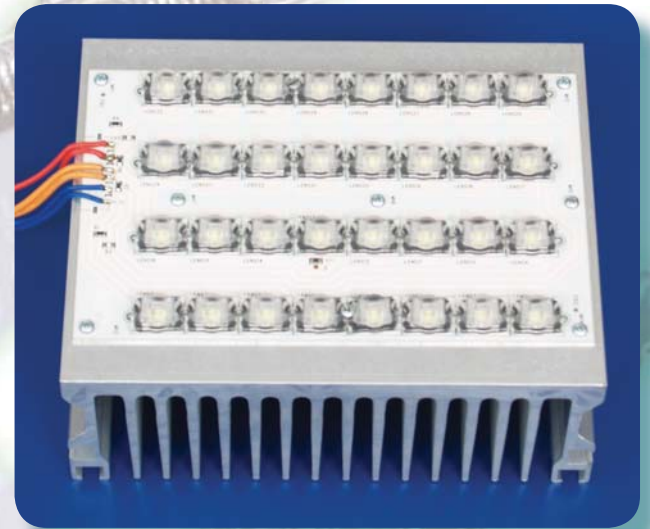
- 48W CV/CC power supply;
- Operating temperature: - 25°C to +50°C;
- Dimming controlled via 0 ~ 10VDC;
- Output voltage up to 160V;
- Power factor > 0.92;
- MTBF @50°C > 30 000 hours;
- UL1012, cUL, FCC and CE (EN55015, EN61347) compliant.



The Leader in Ingress Protection

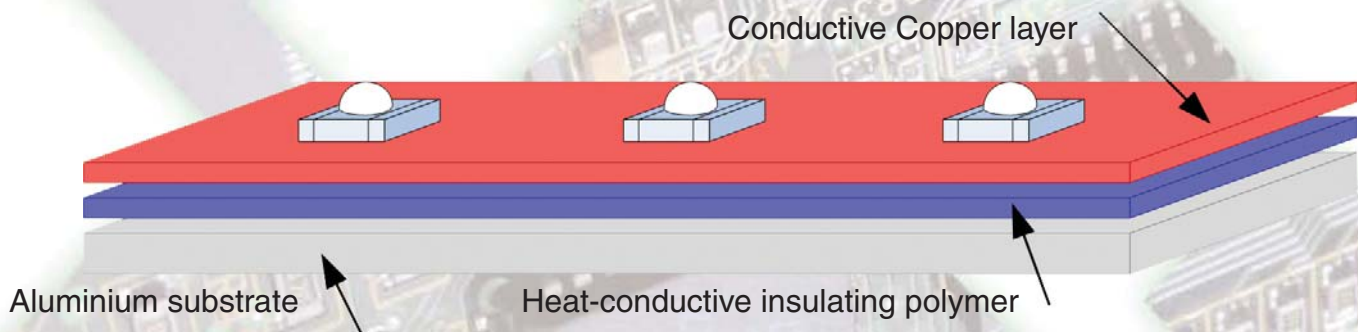
First Class Technical Support from DESC (Design and Engineering Support Centre)

DESC offers highly qualified technical and design support for selecting application specific HP-LEDs and the PCB (metal clad or FR4). In addition,



DESC can provide design guidelines for the most demanding optical and thermal specifications.

Aluminum PCBs with CREE LEDs



DESC provides support for customized electrical, thermal and optical system designs, as well as for circuit layout (Al-polymer PCB) for applications involving HP-LEDs.

Efficient Assembly Capabilities

The in-house assembly facility features automatic PCB assembly capability for LED modules. The Dima line includes automatic pick and place, special nozzles for HP-LED placement and high precision reflow oven. In addition, it has capabilities for automatic solder-paste printing, selective soldering and visual inspection.



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