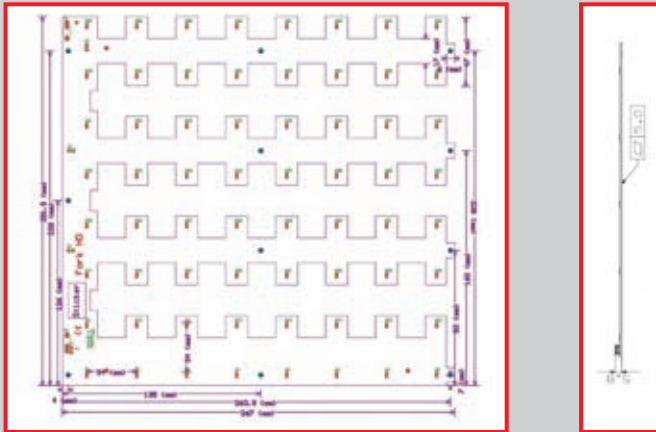


LED FORK HD

Product description



- Ideal for linear and panel lights
- Luminous flux range from 1400 – 4580 lm
- Efficacy of the module up to 190 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Good uniform light, even if several LED modules are used together in a line
- Self-cooling (no additional heat sink required)
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 40,000 hours

Fork HD module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in panel luminaires with diffused light. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 190 lm/W. The module is driven by constant current max 500mA/1200mA with voltage of max 25V. The design is improved for simple installation. The module family covers the standard –267mm/252mm – used in the usual 30/60 and 60/60 panels with diffused light.

Fork HD	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CRI
Module Low cost Efficiency at constant current 500mA	830	1400 Lm	24.75 V	12.38 W	113 Lm/W	>80
	840	1470 Lm	24.75 V	12.38 W	118 Lm/W	>80
	850	1530 Lm	24.75 V	12.38 W	123 Lm/W	>80
Module High Output at constant current 1200mA	830	3650 Lm	24.4 V	29.3 W	124 Lm/W	>80
	840	3840 Lm	24.4 V	29.3 W	131 Lm/W	>80
	850	4000 Lm	24.4 V	29.3 W	136 Lm/W	>80
Module High Efficiency at constant current 500mA	830	1980 Lm	22.4 V	11.2 W	170 Lm/W	>80
	840	2040 Lm	22.4 V	11.2 W	180 Lm/W	>80
	850	2110 Lm	22.4 V	11.2 W	185 Lm/W	>80
Module High Efficiency and High Output at constant current 1200mA	830	4280 Lm	24.65 V	29.6 W	144 Lm/W	>80
	840	4400 Lm	24.65 V	29.6 W	148 Lm/W	>80
	850	4500 Lm	24.65 V	29.6 W	152 Lm/W	>80

LED FORK

Product description

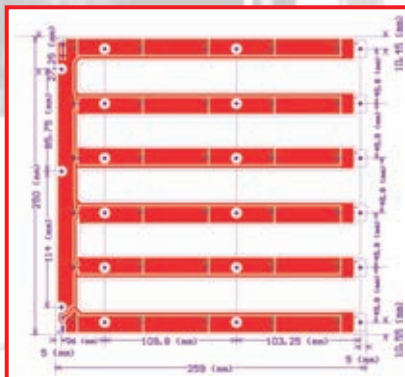


- Ideal for linear and panel lights
- Luminous flux range from 870 – 1584 lm
- Efficacy of the module up to 167 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 3000 to 6500 K
- Good uniform light, even if several LED modules are used together in a line
- Self-cooling (no additional heat sink required)
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

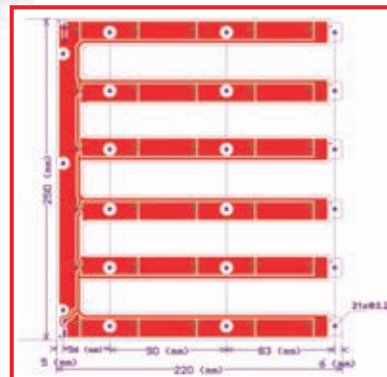
Fork module with Samsung LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in panel luminaires. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 139 lm/W. The module is driven by constant current max 700mA with voltage of max 16V. The design is improved for simple installation. The module family covers two standards – Fork SQ30 2625 - 259mm/250mm and Fork RT30 2225 - 220mm/250mm.

Fork SQ30 2625 Fork RT30 2225	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Operating mode High Efficiency at constant current 390mA	830	870 Lm	14.75 V	5.75 W	151 Lm/W	>80
	840	930 Lm	14.75 V	5.75 W	161 Lm/W	>80
	850	960 Lm	14.75 V	5.75 W	167 Lm/W	>80
Operating mode High Output at constant current 700mA	830	1435 Lm	15.7 V	11 W	130 Lm/W	>80
	840	1534 Lm	15.7 V	11 W	139 Lm/W	>80
	850	1584 Lm	15.7 V	11 W	144 Lm/W	>80

Fork SQ30 2625

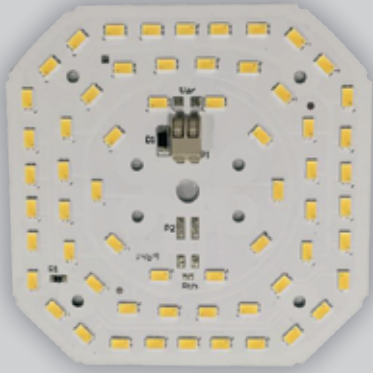


Fork RT30 2225



Luna 10-20W

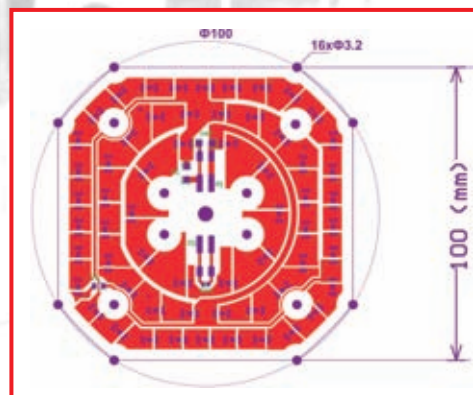
Product description



- Ideal for linear and panel lights
- Luminous flux range from 1400 – 3000 lm
- Efficacy of the module up to 159 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Aluminum plate for best heat dissipation
- Samsung LED chips
- Push terminals for quick and simple wiring
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

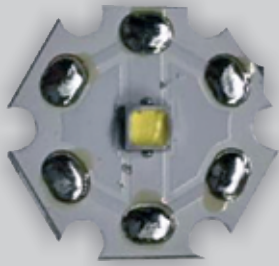
Luna 10-20W module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed on aluminium plate for best heat dissipation and for use in planar luminaires. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 159 lm/W. There are two modules in this family - low power – Luna 10Watts designed to fit standard drivers 10W @350mA and Luna 20W - 20Watts @700mA

Luna 10-20W	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Luna 20W Operating mode High Efficiency at constant current 350mA	830	1523 Lm	29 V	10.2 W	149 Lm/W	>80
	840	1588 Lm	29 V	10.2 W	156 Lm/W	>80
	850	1620 Lm	29 V	10.2 W	159 Lm/W	>80
Luna 20W Operating mode High Output at constant current 700mA	830	2820 Lm	31.5 V	22 W	128 Lm/W	>80
	840	2940 Lm	31.5 V	22 W	134 Lm/W	>80
	850	3000 Lm	31.5 V	22 W	136 Lm/W	>80
Luna 10W Operating mode High Output at constant current 350mA	830	1410 Lm	31.5 V	11 W	128 Lm/W	>80
	840	1470 Lm	31.5 V	11 W	134 Lm/W	>80
	850	1500 Lm	31.5 V	11 W	136 Lm/W	>80

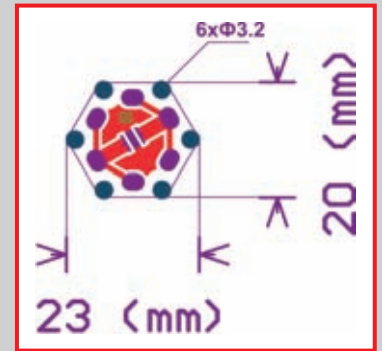


Star XTE

Product description



- Ideal for spotlights, flashlights and down lights
- Luminous flux range from 130 – 800 lm
- Efficacy of the module up to 178 lm/W
- Naturally most stable shape perfect hexagon
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Three of the leading LED producers compatible – CREE / Samsung / LG
- Multifunctional power connection design
- Plenty of options for attachment
- Excellent thermal management thanks to high thermoconductive aluminum base with thick copper layer
- Long life-time: 50,000 hours



Star XTE engine uses LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in flashlights. The small size and high luminous flux makes the LED engine perfect for any housing with troubled size like flashlights. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 70 and module efficiency of up to 178 lm/W. The module is driven by constant current max 2000mA with voltage of max 3.2V. The design is improved for simple installation. Custom high CRI available. The luminous flux, color, typical voltage and maximum current can be customized based on different LED like CREE XPG, OSRAM OSOLON, etc.

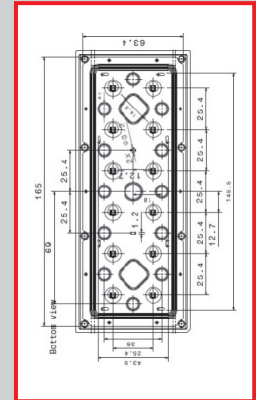
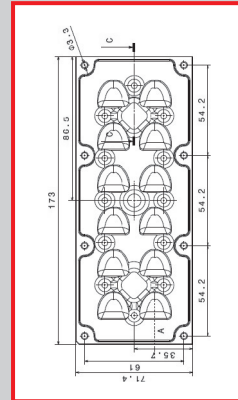
Star XTE	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Cree XT-E High Efficiency @ 350mA	740	140 Lm	2.85 V	0.998 W	140 Lm/W	>80
	750	148 Lm	2.85 V	0.998 W	148 Lm/W	>80
	760	158 Lm	2.85 V	0.998 W	158 Lm/W	>80
Cree XT-E High Output @ 800mA	740	299 Lm	3.08 V	2.467 W	121 Lm/W	>80
	750	317 Lm	3.08 V	2.467 W	128 Lm/W	>80
	760	338 Lm	3.08 V	2.467 W	137 Lm/W	>80
Samsung LH351A High Efficiency @ 350mA	740	130 Lm	2.96 V	1.035 W	126 Lm/W	>80
	750, 757, 765	148 Lm	2.96 V	1.035 W	143 Lm/W	>80
Samsung LH351A High Output @ 700mA	740	237 Lm	3.08 V	2.158 W	110 Lm/W	>80
	750, 757, 765	254 Lm	3.08 V	2.158 W	118 Lm/W	>80
Cree XP-L High Efficiency @ 500mA	740, 750, 760	248 Lm	2.8 V	1.395 W	178 Lm/W	>80
Cree XP-L High Output @ 2000mA	740, 750, 760	802 Lm	3.16 V	6.317 W	127 Lm/W	>80

12XTE Strada

Product description



- Ideal for industrial and outdoor lightning
- Luminous flux range from 1600 – 9000 lm
- Efficacy of the module up to 175 lm/W
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Lenses with various angles available
- Optional thermoresistor for protection and/or measurement(dimming)
- Optional TVS protection
- Optional Wago connectors
- Simple installation (e.g. screws)
- Long life-time: >50,000 hours

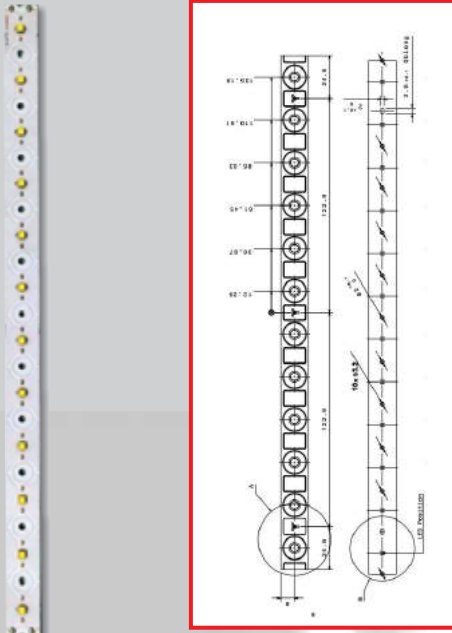


12XTE Strada module with LEDs of the latest generation from the top chip producers in the world – CREE and SAMSUNG achieve maximum efficiency values. The modules have been specifically developed on high thermoconductive aluminium plate with extra thick copper. The product range covers colour temperatures Warm White 3000, Neutral White 4000, Cold White 5000K and 6000K and module efficiency of up to 175 lm/W. The module is driven by constant current. The design is improved for simple installation. The module covers three types of LEDs for most applications. This LED engine is compatible with LEDIL lenses family Strada – with the different angles to achieve all types of distortions. There is an optional thermistor for temperature control, TVS for extra overvoltage protection and Wago 2059 push terminals for simple connection.

12XTE Strada	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Cree XT-E High Efficiency @ 350mA	740	1680 Lm	34.2 V	11.97 W	140 Lm/W	>80
	750	1776 Lm	34.2 V	11.97 W	148 Lm/W	>80
	760	1896 Lm	34.2 V	11.97 W	158 Lm/W	>80
Cree XT-E High Output @ 800mA	740	3592 Lm	37 V	29.6 W	121 Lm/W	>80
	750	3798 Lm	37 V	29.6 W	128 Lm/W	>80
	760	4054 Lm	37 V	29.6 W	137 Lm/W	>80
Samsung LH351A High Efficiency @ 350mA	740	1560 Lm	35.5 V	12.42 W	126 Lm/W	>80
	750, 757, 765	1776 Lm	35.5 V	12.42 W	135 Lm/W	>80
Samsung LH351A High Output @ 700mA	740	2844 Lm	37 V	25.9 W	110 Lm/W	>80
	750, 757, 765	3048 Lm	37 V	25.9 W	118 Lm/W	>80
Cree XP-L High Efficiency @ 500mA	740, 750, 760	2970 Lm	33.5 V	16.74 W	175 Lm/W	>80
Cree XP-L High Output @ 2000mA	740, 750, 760	9623 Lm	37.9 V	75.8 W	127 Lm/W	>80

12XTE Vanessa

Product description



- Ideal for linear and panel lights
- Luminous flux range from 1600 – 9000 lm
- Efficacy of the module up to 175 lm/W
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Lenses with various angles available
- Simple installation (e.g. screws)
- Long life-time: >50,000 hours

12XTE Vanessa module with LEDs of the latest generation from the top chip producers in the world – CREE and SAMSUNG achieve maximum efficiency values. The modules have been specifically developed on high thermoconductive aluminium plate with extra thick copper. The product range covers colour temperatures Warm White 3000, Neutral White 4000, Cold White 5000K and 6000K and module efficiency of up to 175 lm/W. The module is driven by constant current. The design is improved for simple installation. The module covers three types of LEDs for most applications. This LED engine is compatible with LEDIL lenses family Vanessa – with the different angles to achieve all types of distortions.

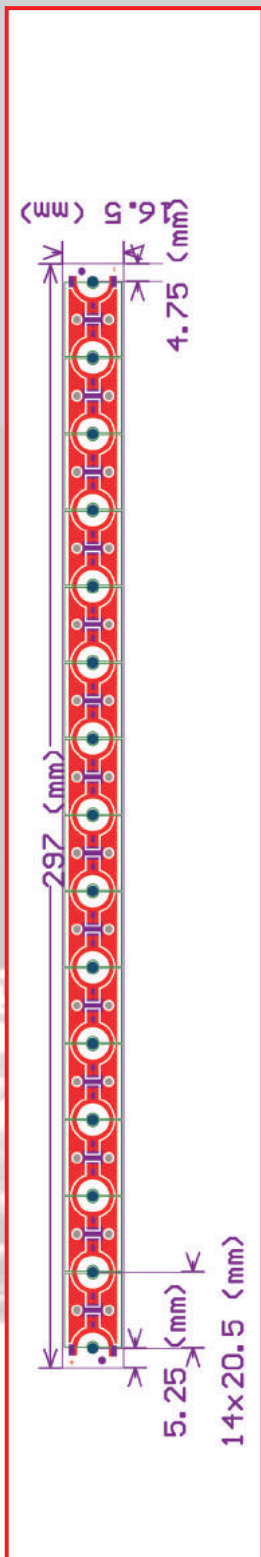
12XTE Vanessa	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Cree XT-E High Efficiency @ 350mA	740	1680 Lm	34.2 V	11.97 W	140 Lm/W	>80
	750	1776 Lm	34.2 V	11.97 W	148 Lm/W	>80
	760	1896 Lm	34.2 V	11.97 W	158 Lm/W	>80
Cree XT-E High Output @ 800mA	740	3592 Lm	37 V	29.6 W	121 Lm/W	>80
	750	3798 Lm	37 V	29.6 W	128 Lm/W	>80
	760	4054 Lm	37 V	29.6 W	137 Lm/W	>80
Samsung LH351A High Efficiency @ 350mA	740	1560 Lm	35.5 V	12.42 W	126 Lm/W	>80
	750, 757, 765	1776 Lm	35.5 V	12.42 W	135 Lm/W	>80
Samsung LH351A High Output @ 700mA	740	2844 Lm	37 V	25.9 W	110 Lm/W	>80
	750, 757, 765	3048 Lm	37 V	25.9 W	118 Lm/W	>80
Cree XP-L High Efficiency @ 500mA	740, 750, 760	2970 Lm	33.5 V	16.74 W	175 Lm/W	>80
Cree XP-L High Output @ 2000mA	740, 750, 760	9623 Lm	37.9 V	75.8 W	127 Lm/W	>80

14XTE

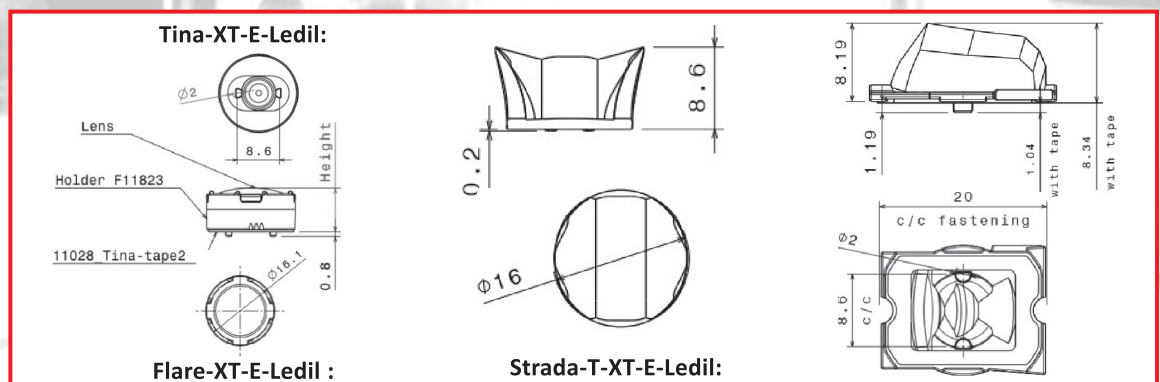
Product description

- Ideal for linear and panel lights
- Luminous flux range from 1800 – 11000 lm
- Efficacy of the module up to 175 lm/W
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Lenses with various angles available
- Simple installation (e.g. screws)
- Long life-time: >50,000 hours

14XTE module with LEDs of the latest generation from the top chip producers in the world – CREE and SAMSUNG achieve maximum efficiency values. The modules have been specifically developed on high thermoconductive aluminium plate with extra thick copper. The product range covers colour temperatures Warm White 3000, Neutral White 4000, Cold White 5000K and 6000K and module efficiency of up to 175 lm/W. The module is driven by constant current. The design is improved for simple installation. The module covers three types of LEDs for most applications. This LED engine is compatible with three LEDIL single lenses families – with the different angles to achieve all types of distortions.

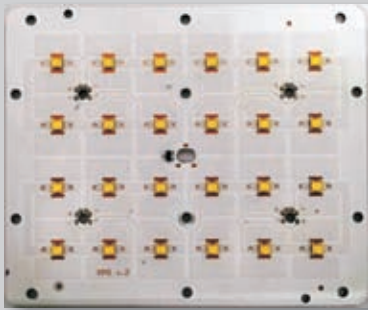


14XTE	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Cree XT-E High Efficiency @ 350mA	740	1960 Lm	39.9 V	13.96 W	140 Lm/W	>80
	750	2072 Lm	39.9 V	13.96 W	148 Lm/W	>80
	760	2212 Lm	39.9 V	13.96 W	159 Lm/W	>80
Cree XT-E High Output @ 800mA	740	4191 Lm	43.2 V	34.5 W	122 Lm/W	>80
	750	4431 Lm	43.2 V	34.5 W	128 Lm/W	>80
	760	4730 Lm	43.2 V	34.5 W	137 Lm/W	>80
Samsung LH351A High Efficiency @ 350mA	740	1820 Lm	41.4 V	14.5 W	126 Lm/W	>80
	750, 757, 765	2072 Lm	41.4 V	14.5 W	143 Lm/W	>80
Samsung LH351A High Output @ 700mA	740	3318 Lm	43.2 V	30.2 W	110 Lm/W	>80
	750, 757, 765	3556 Lm	43.2 V	30.2 W	118 Lm/W	>80
Cree XP-L High Efficiency @ 500mA	740, 750, 760	3413 Lm	39.1 V	19.5 W	175 Lm/W	>80
Cree XP-L High Output @ 2000mA	740, 750, 760	11227 Lm	44.2 V	88.4 W	127 Lm/W	>80



24XTE

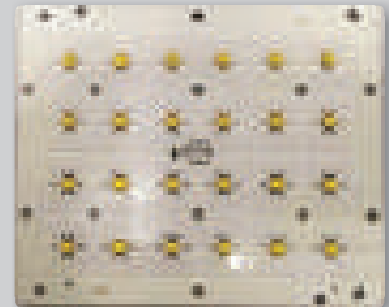
8x3



Product description

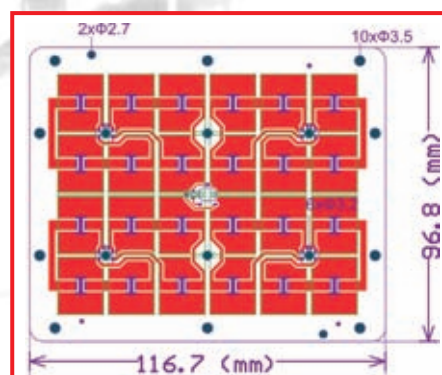
- Luminous flux range from 2700 – 8000 lm
- Efficacy of the module up to 158 lm/W
- Small luminous flux tolerances
- Colour temperatures from 4000 to 6500 K
- Two models for different voltage
- Applicable for photovoltaics
- Optional thermoresistor / sensor
- LEDLINK lenses usable
- Could reach high power in small area
- Simple installation (e.g. screws)
- Long life-time: >50,000 hours

2x12



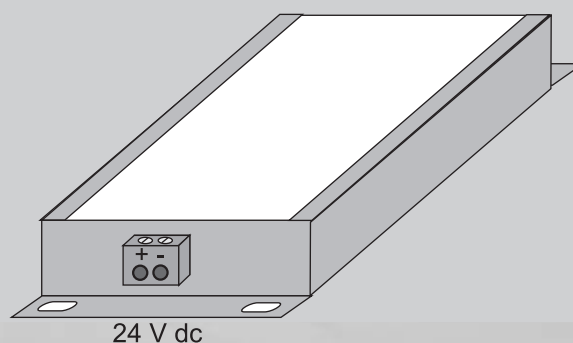
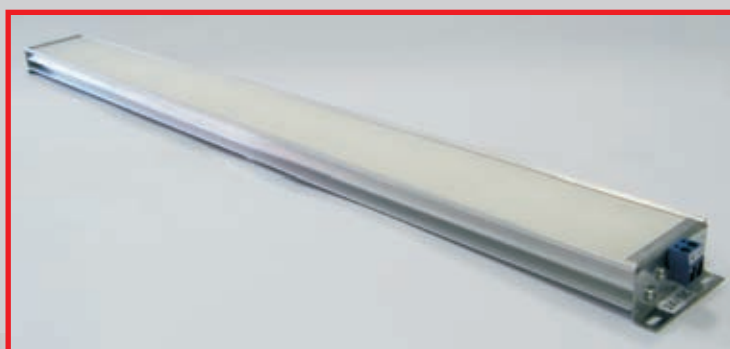
24XTE module with LEDs of the latest generation from the top chip producers in the world – CREE and SAMSUNG achieve maximum efficiency values. The modules have been specifically developed on high thermoconductive aluminium plate with extra thick copper. The product range covers colour temperatures Warm White 3000, Neutral White 4000, Cold White 5000K and 6000K and module efficiency of up to 168 lm/W. The modules have been specifically developed for use street lightning. The 8x3 model is specially designed for photovoltaics – runs from 8.55V – perfect for 12V battery plus driver. The module is driven by constant current. The design is improved for simple installation.

24XTE	Photometric code	Typ. luminous flux at tp = 25 °C	8x3 Typ. Voltage at tp=25 °C	2x12 Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Cree XT-E High Efficiency @ 350mA/str	740	3360 Lm	8.55 V	34.2 V	23.94 W	140 Lm/W	>80
	750	3552 Lm	8.55 V	34.2 V	23.94 W	148 Lm/W	>80
	760	3792 Lm	8.55 V	34.2 V	23.94 W	158 Lm/W	>80
Cree XT-E High Output @ 800mA/str	740	7184 Lm	9.25 V	37 V	59.2 W	121 Lm/W	>80
	750	7596 Lm	9.25 V	37 V	59.2 W	128 Lm/W	>80
	760	8108 Lm	9.25 V	37 V	59.2 W	137 Lm/W	>80
Samsung LH351A High Efficiency @ 350mA/str	740	3120 Lm	8.88 V	35.5 V	24.84 W	126 Lm/W	>80
	750, 757, 765	3552 Lm	8.88 V	35.5 V	24.84 W	135 Lm/W	>80
Samsung LH351A High Output @ 700mA/str	740	5688 Lm	9.25 V	37 V	51.8 W	110 Lm/W	>80
	750, 757, 765	6096 Lm	9.25 V	37 V	51.8 W	118 Lm/W	>80



T8/T5 LED

High efficiency LED module designed to be integrated in standard grid lamps



Product Description

The module is designed to be integrated in standard grid lamps. With equivalent dimensions the T8/T5 LED produces the same amount of light with savings of up to 55% of electricity. The module features unique construction, integrated mirror optics, high efficiency diffuser and the latest LED technology. T8/T5 LED has efficiency up to 110 lm/W and is completely compatible with all 24Vdc (36 Vdc optional) LED power supplies.

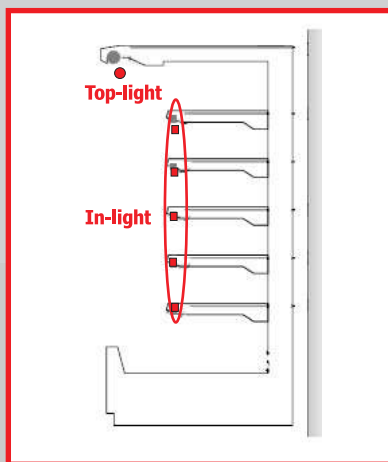
Due to the high uniformity of the emitted light and the low overall brightness, T8/T5 LED is applicable where the unified glare rating is of importance: schools, offices, hospitals, working halls. Containing no mercury, lead, or glass, LED modules do not present risk of area contamination that is possible with fluorescent lamp breakage.

T8/T5LED	10W	20W	25W
General Characteristics			
LED chip manufacturer	OSRAM		
Housing	Anodized aluminium, mirror optics, PC diffuser		
Life to 70% lumen maintenance	70 000 - 100 000 hr		
Operating temperature	-30 - +40 °C		
Environment protection	IP 42		
Electrical Characteristics			
Equivalent to fluorescent tube T5/T8	14 W/ 18 W	28 W/ 36 W	35 W/ 58 W
Type of power source (not included)	Constant Voltage 24 ±1 Vdc (optional 36 V dc)		
Power connection	2-way screw terminal		
Light characteristics			
Color temperature	2700, 3000, 3500, 4000, 4500 or 5000 °C		
Color rendering index	CRI > 80		
Luminous flux	900 - 1100 lm	1800 - 2200 lm	2300 - 2800 lm
Product Dimensions			
Length	555 mm	1100 mm	1400 mm
Width/height	50x25 mm		
Weight	0,3 kg	0,6 kg	0,75 kg

Benefits

- > Excellent total cost of ownership with attractive payback times
- > No annoying noises, vibrations and flickering
- > Unified Glare Rating (UGR) is lower or equal to fluorescent tube
- > Long-life LEDs (with an average rated lifetime of 70 000 - 100 000 hours) reduce the maintenance and product replacement costs that are associated with fluorescent systems
- > Significant sustainability opportunity due to lower energy consumption, reduced waste and elimination of hazardous substances such as mercury and lead
- > Overall, the usage of LEDs helps to reduce the internal heating in the premises.
- > 100% efficiency - directed light which guarantees that all of the luminosity goes where you need it

New LED Display Modules for under canopy and on shelf applications



Product Description

Our LED display modules are designed to replace traditional tubular fluorescent lamps in the canopy of multi-deck cooler cabinets or on vertical racks. Giving an bright and uniform glow across displayed goods, the modules provide optimal lighting vertically across the all decks. As part of a multi-deck lighting system, both modules feature the latest LED technology and are completely compatible with all constant current LED power drivers.

For ease of installation, we supply Top-light LED display modules with mounting brackets, which allow free rotation of the module.

The modules are available in custom lengths in steps of 30 cm and color temperatures from 2700 to 6000°K, to suit the varying needs of the client (e.g. butcher shops, bakeries, supermarkets, etc.). Overall, the usage of LEDs helps to reduce the internal heating and surface drying of goods which can help to reduce food spoilage. Containing no mercury, lead, or glass, LED modules do not present risk of food contamination that is possible with fluorescent lamp breakage.

Benefits

- > Excellent total cost of ownership with attractive payback times
- > Ease of installation
- > Targeted light placement, improving and enhancing overall visibility of merchandise
- > Long-life LEDs (with an average rated lifetime of 70,000 hours) reduce the maintenance and product replacement costs that are associated with fluorescent systems
- > Significant sustainability opportunity due to lower energy consumption, reduced waste and elimination of hazardous substances such as mercury and lead