



- ▶ Two CNC punching presses TRUMPF with different type of tools.
- ▶ Two CNC hydraulic press brakes.
- ▶ 10 punching presses - mechanical and pneumatic - up to 63 tons.
- ▶ Powder coating line.
- ▶ CAD/CAM Engineering design and manufacturing.



- ▶ CAD mould design and mould manufacturing
- ▶ 3D product design
- ▶ 5 new CNC injection molding machines
- ▶ 1 vertical CNC injection molding machines
- ▶ 4 conventional injection molding machines
- ▶ Maximum weight of the manufacture products - 1.6 kg
- ▶ Clamping force: up to 630 tons

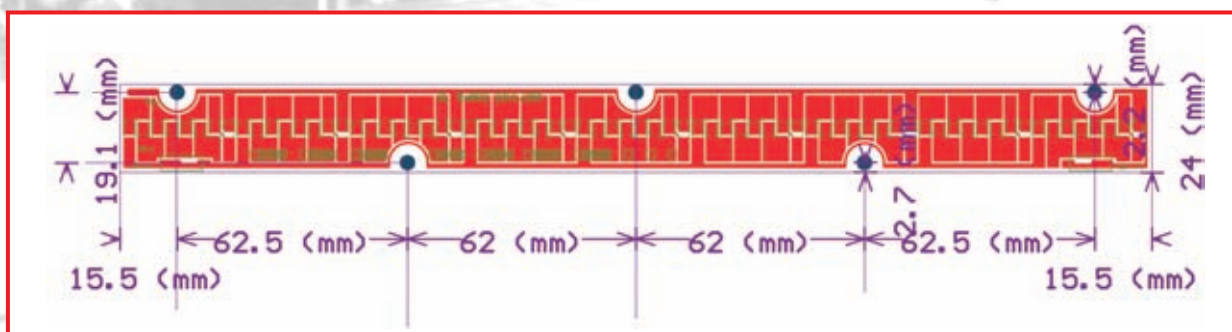
X-WING

Product description

- Ideal for linear and panel lights
- Luminous flux range from 1300 – 3900 lm
- Efficacy of the module up to 180 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Long life-time: 50,000 hours
- Good uniform light, when several LED modules are used together in a line
- Excellent thermal management thanks to the high thermoconductive aluminum base
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Zaga standard type screw position

X-WING module with OSRAM and Samsung LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed 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 180 lm/W. The module is driven by constant current max 1050mA with voltage of max 19V. The design is improved for simple installation. The LED engine is designed for a single line of 2 modules in series to generate huge luminous flux – to cover 4 standard lines of 600mm fluorescent tubes. Based on the new design LED panel X-WING.

X-WING	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
SL 9x8 Operating mode High Efficiency at constant current 500mA	830	1946 Lm	23.2 V	11.6 W	168 Lm/W	>80
	840	2041 Lm	23.2 V	11.6 W	176 Lm/W	>80
	850	2104 Lm	23.2 V	11.6 W	181 Lm/W	>80
SL 9x8 Operating mode High Output at constant current 1050mA	830	3640 Lm	25.1 V	26.4 W	138 Lm/W	>80
	840	3817 Lm	25.1 V	26.4 W	145 Lm/W	>80
	850	3935 Lm	25.1 V	26.4 W	149 Lm/W	>80
SL 9x6 Operating mode High Efficiency at constant current 500mA	830	1358 Lm	17.4 V	8.7 W	156 Lm/W	>80
	840	1414 Lm	17.4 V	8.7 W	162 Lm/W	>80
	850	1446 Lm	17.4 V	8.7 W	166 Lm/W	>80
SL 9x6 Operating mode High Output at constant current 1050mA	830	2538 Lm	18.9 V	19.85 W	128 Lm/W	>80
	840	2646 Lm	18.9 V	19.85 W	133 Lm/W	>80
	850	2700 Lm	18.9 V	19.85 W	136 Lm/W	>80



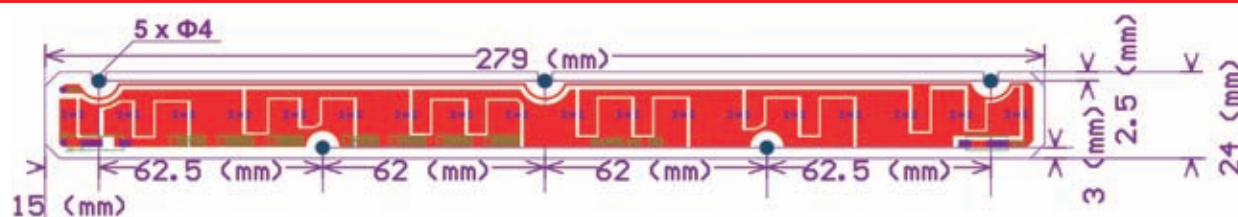
Zaga

Product description

- Ideal for linear and panel lights
- Luminous flux range from 450 – 2250 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
- Good uniform light, when several LED modules are used together in a line
- Standard attachment holes location
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

Zaga 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 linear and 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. The module is driven by constant current. The design is improved for simple installation. The module family has a wide range of forward voltage and current allowing the use of most of the standard power supplies and creating a fixture with desired power and respectively luminous flux output.

Zaga	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
6x3 Operating mode High Efficiency at constant current 350mA	830	457 Lm	8.8 V	3.08 W	148 lm/W	>80
	840	476 Lm	8.8 V	3.08 W	155 lm/W	>80
	850	486 Lm	8.8 V	3.08 W	158 lm/W	>80
6x3 Operating mode High Output at constant current 700mA	830	846 Lm	9.5 V	6.65 W	127 lm/W	>80
	840	882 Lm	9.5 V	6.65 W	133 lm/W	>80
	850	900 Lm	9.5 V	6.65 W	135 lm/W	>80
3x6 Operating mode High Efficiency at constant current 175mA	830	457 Lm	17.5 V	3.06 W	149 lm/W	>80
	840	476 Lm	17.5 V	3.06 W	156 lm/W	>80
	850	486 Lm	17.5 V	3.06 W	159 lm/W	>80
3x6 Operating mode High Output at constant current 350mA	830	846 Lm	19 V	6.65 W	127 lm/W	>80
	840	882 Lm	19 V	6.65 W	133 lm/W	>80
	850	900 Lm	19 V	6.65 W	135 lm/W	>80
2x9 Operating mode High Efficiency at constant current 175mA	830	643 Lm	27.5 V	4.8 W	134 lm/W	>80
	840	670 Lm	27.5 V	4.8 W	140 lm/W	>80
	850	684 Lm	27.5 V	4.8 W	142 lm/W	>80
3x15 Operating mode High Efficiency at constant current 175mA	830	1142 Lm	43.8 V	7.7 W	148 lm/W	>80
	840	1191 Lm	43.8 V	7.7 W	155 lm/W	>80
	850	1215 Lm	43.8 V	7.7 W	158 lm/W	>80
3x15 Operating mode High Output at constant current 350mA	830	2115 Lm	47.2 V	16.5 W	128 lm/W	>80
	840	2205 Lm	47.2 V	16.5 W	134 lm/W	>80
	850	2250 Lm	47.2 V	16.5 W	136 lm/W	>80



Office 21V-42V

Product description

- Ideal for linear and panel lights
- Luminous flux range from 1500 – 2100 lm
- Efficacy of the module up to 158 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, when several LED modules are used together in a line
- High efficient Samsung LED chips
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

Office 21V-42V with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed 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 158 lm/W. The module is driven by constant current max 700mA with voltage of max 22V. The design is improved for simple installation. The module is designed to replace T5/T8 flourescent tube 600mm. We supply a specially designed diffuser with holders to cover the LEDs. At custom request we can produce this module with different color and higher CRI. This LED engine is designed for one of the latest LED fixtures of the company and can be delivered as a set of LED PCBs, driver, diffusers, caps for the diffusers and holders for a different housing.

Office 21V-42V	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 500mA	830	1579 Lm	21.2 V	10.6 W	149 Lm/W	>80
	840	1646 Lm	21.2 V	10.6 W	155 Lm/W	>80
	850	1680 Lm	21.2 V	10.6 W	158 Lm/W	>80
Operating mode High Output at constant current 700mA	830	1974 Lm	22.1 V	15.5 W	127 Lm/W	>80
	840	2058 Lm	22.1 V	15.5 W	133 Lm/W	>80
	850	2100 Lm	22.1 V	15.5 W	135 Lm/W	>80

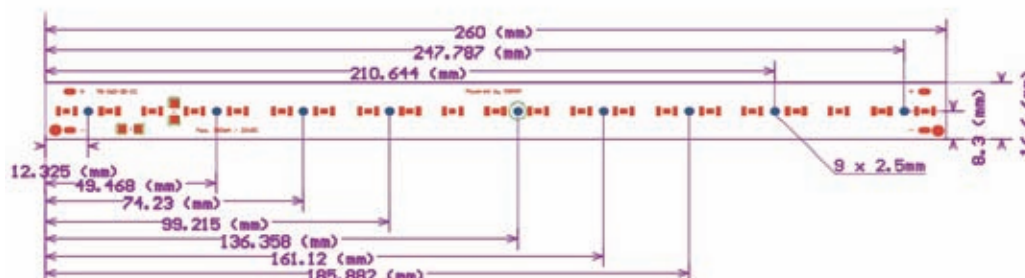
T8-260 OD

Product description

- Ideal for linear and panel lights
- Luminous flux range from 550 – 1040 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
- Good uniform light, when several LED modules are used together in a line
- Module for constant voltage with low flickering index
- Module for constant current for higher efficacy
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

T8-260OD 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 - for constant voltage that guarantees low flickering index at 24VDC with additional DC/DC current driver and module driven by constant current with higher efficiency. The 24VDC module can be adjusted to custom power through the DC/DC driver. It is designed to be in a line with several others connected in parallel.

T8-260 OD	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 voltage 24VDC flickering <0.2%	830	592 Lm	24 V	5 W	118 Lm/W	>80
	840	617 Lm	24 V	5 W	123 Lm/W	>80
	850	630 Lm	24 V	5 W	126 Lm/W	>80
Operating mode High Output at constant voltage 24VDC flickering <0.2%	830	831 Lm	24 V	7.2 W	115 Lm/W	>80
	840	867 Lm	24 V	7.2 W	120 Lm/W	>80
	850	885 Lm	24 V	7.2 W	123 Lm/W	>80
Operating mode High Efficiency at constant current 175mA	830	529 Lm	20.3V	3.55 W	149 Lm/W	>80
	840	554 Lm	20.3V	3.55 W	156 Lm/W	>80
	850	565 Lm	20.3 V	3.55 W	159 Lm/W	>80
Operating mode High Output at constant current 350mA	830	988 Lm	22 V	7.7 W	128 Lm/W	>80
	840	1032 Lm	22 V	7.7 W	134 Lm/W	>80
	850	1047 Lm	22 V	7.7 W	136 Lm/W	>80



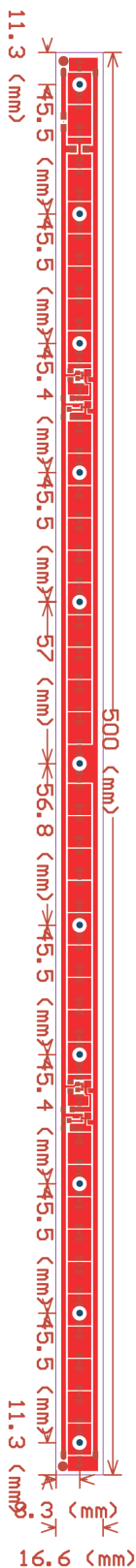
440D CV

Product description

- Ideal for linear and panel lights
- Luminous flux range from 1240 – 1850 lm
- Efficacy of the module up to 132 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
- Aluminum base for best thermoconductivity
- Low flickering <0.2%
- Osram LED chips
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

440D CV module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The additional DC/DC driver ensures very low flickering index <0.2% that covers even the highest standards. 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 132 lm/W. The module is driven by constant voltage at 36VDC. The design is improved for simple installation. This LED engine is designed to fit a patented aluminum profile where it is pressed into to ensure best heat dissipation. Custom higher CRI can be achieved.

440D	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 280mA	830	1240 Lm	36 V	10 W	124 Lm/W	>80
	840	1293 Lm	36 V	10 W	129 Lm/W	>80
	850	1320 Lm	36 V	10 W	132 Lm/W	>80
Operating mode High Output at constant current 400mA	830	1741 Lm	36 V	14.4 W	121 Lm/W	>80
	840	1816 Lm	36 V	14.4 W	126 Lm/W	>80
	850	1854 Lm	36 V	14.4 W	129 Lm/W	>80



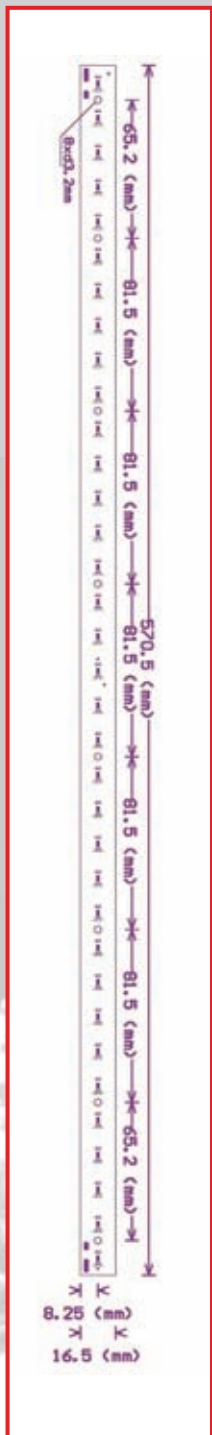
ProLight 600

Product description

- Ideal for linear and panel lights
- Perfect for replacing single 600/1200mm florescent tube
- Luminous flux range from 1140 – 2280 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 2700 to 6500 K
- Good uniform light, when several LED modules are used together in a line
- Samsung high efficiency LED chips
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

ProLight 600 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 planar luminaires to replace single 1200mm fluorescent tube (by 2 LED engines in series). 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 167 lm/W. The module is driven by constant current max 700mA with voltage of max 23V. The design is improved for simple installation.

ProLight 600	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
Operating mode High Efficiency at constant current 350mA	830	1139 Lm	20.8 V	7.28 W	156 Lm/W	>80
	840	1176 Lm	20.8 V	7.28 W	161 Lm/W	>80
	850	1213 Lm	20.8 V	7.28 W	167 Lm/W	>80
Operating mode High Output at constant current 700mA	830	2148 Lm	22.7 V	15.89 W	135 Lm/W	>80
	840	2217 Lm	22.7 V	15.89 W	139 Lm/W	>80
	850	2287 Lm	22.7 V	15.89 W	144 Lm/W	>80



ProLight 1200

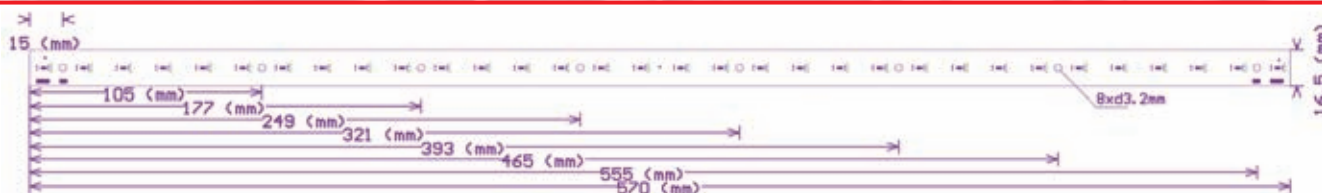
Product description

- Ideal for linear and panel lights
- Perfect for replacing 1200mm florescent tube
- Luminous flux range from 970 – 1970 lm
- Efficacy of the module up to 176 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, when several LED modules are used together in a line
- Samsung high efficiency LED chips
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

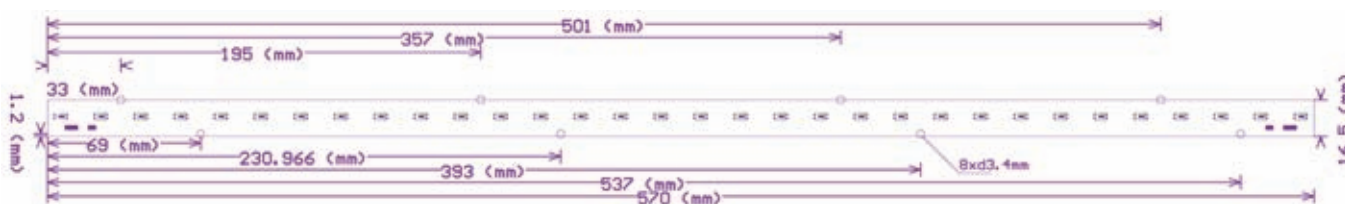
ProLight 1200 module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in planar luminaires to replace two parallel 1200mm fluorescent tube (by 4 LED engines in series). The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 176 lm/W. The module is driven by constant current max 1050mA with voltage of max 13V. The design is improved for simple installation.

ProLight 1200	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 500mA	830	972 Lm	11.76 V	5.88 W	165 Lm/W	>80
	840	1004 Lm	11.76 V	5.88 W	171 Lm/W	>80
	850	1035 Lm	11.76 V	5.88 W	176 Lm/W	>80
Operating mode High Output at constant current 1050mA	830	1855 Lm	12.84 V	13.48 W	138 Lm/W	>80
	840	1915 Lm	12.84 V	13.48 W	142 Lm/W	>80
	850	1975 Lm	12.84 V	13.48 W	147 Lm/W	>80

ProLight 1200



ProLight 1200 v.2



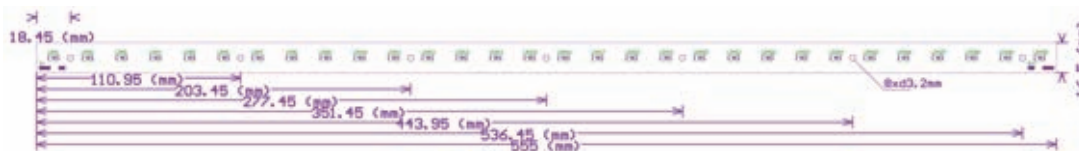
ProLight 1500

Product description

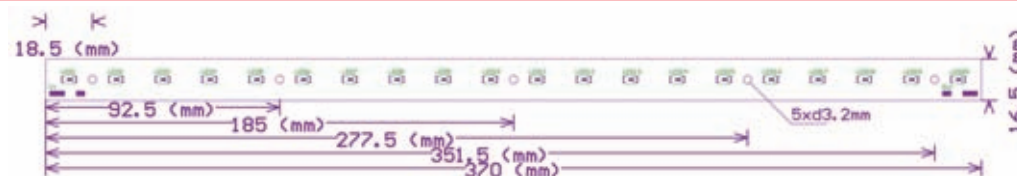
- Ideal for linear and panel lights
- Perfect for replacing 150cm florescent tube
- Luminous flux range for set 2600 – 4000 lm
- Efficacy of the module up to 167 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Good uniform light, when several LED modules are used in a line
- Samsung high efficiency LED chips
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

ProLight 1500 module set with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in planar luminaires to replace two parallel 1500mm fluorescent tube (by 4 ProLight 1500-1 and 2 ProLight 1500-2 LED engines in series). 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 167 lm/W. The module set is driven by constant current max 1050mA with voltage of max 50V. The design is improved for simple installation and for standard constant current SELV power supplies.

ProLight 1500	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
ProLight 1500-1 Operating mode High Efficiency at constant current 700mA	830	977 Lm	8.91 V	6.24 W	157 Lm/W	>80
	840	1008 Lm	8.91 V	6.24 W	162 Lm/W	>80
	850	1040 Lm	8.91 V	6.24 W	167 Lm/W	>80
ProLight 1500-1 Operating mode High Output at constant current 1050mA	830	1414 Lm	9.3 V	9.77 W	145 Lm/W	>80
	840	1459 Lm	9.3 V	9.77 W	149 Lm/W	>80
	850	1505 Lm	9.3 V	9.77 W	154 Lm/W	>80
ProLight 1500-2 Operating mode High Efficiency at constant current 700mA	830	651 Lm	5.94 V	4.16 W	156 Lm/W	>80
	840	672 Lm	5.94 V	4.16 W	162 Lm/W	>80
	850	693 Lm	5.94 V	4.16 W	167 Lm/W	>80
ProLight 1500-2 Operating mode High Output at constant current 1050mA	830	943 Lm	6.2 V	6.51 W	145 Lm/W	>80
	840	973 Lm	6.2 V	6.51 W	149 Lm/W	>80
	850	1003 Lm	6.2 V	6.51 W	154 Lm/W	>80



ProLight 1500-1
(10 strings X 3 led)



ProLight 1500-2
(10 strings X 2 led)

14 OD

Product description

- Ideal for linear and panel lights
- Luminous flux range from 390 – 590 lm
- Efficacy of the module up to 125 lm/W
- Ultra-thin design – only 8mm.
- Standard length – 300mm
- 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, when several LED modules are used together in a line
- Build in TVS for overvoltage protection
- Build in schottky diode for wrong polarity protection
- Simple installation (e.g. screws)
- Long life-time: 40,000 hours

14OD module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for thin tubes and low-cost applications. 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 125 lm/W. The module is driven by constant voltage 24VDC. The design is improved for simple installation. The module's power can be customized up to 5W. It has build in protections against wrong connection of the power supply and overvoltage. Typical application is the LED module for shelves – In Light.

14 OD	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 140mA	830	395 Lm	24 V	3.36 W	118 Lm/W	>80
	840	411 Lm	24 V	3.36 W	122 Lm/W	>80
	850	420 Lm	24 V	3.36 W	125 Lm/W	>80
Operating mode High Output at constant current 200mA	830	554 Lm	24 V	4.8 W	115 Lm/W	>80
	840	578 Lm	24 V	4.8 W	120 Lm/W	>80
	850	590 Lm	24 V	4.8 W	123 Lm/W	>80