

Backlighting Injection Module

M23GX21A



Areas of application

- Signage and illuminated advertising.
- Best for 120~200mm depth light boxes and channel letters.
- Permanent outdoor use in enclosed light boxes or channel letters.

Product features

- Chain of 20 LED modules with three LEDs each.
- High efficiency LED.
- High color consistency (MacAdam 4).
- Beam characteristic: 160°.
- Protection class of LED module: IP65.
- Flexible chain, can be split between any module.
- Mounting with screw or premounted double-sided adhesive tape possible.
- Fully integrated heat sink.
- Nominal life-time up to 50,000 h (at tc 50°C).
- Module size: 44 x 41 x 7.3 mm.

Application data

Module number per Chain	20 pcs
Max. module number per Chain	25 pcs
Distance of modules (wire)	150 mm
Ambient temperature ta	-25 ~ +50 °C
Max. temperature on module tc	65 °C
Storage temperature ts	-40 ~ +85 °C
Risk group (EN 62471:2008)	1
Certification list	CE/RoHS

Technical data

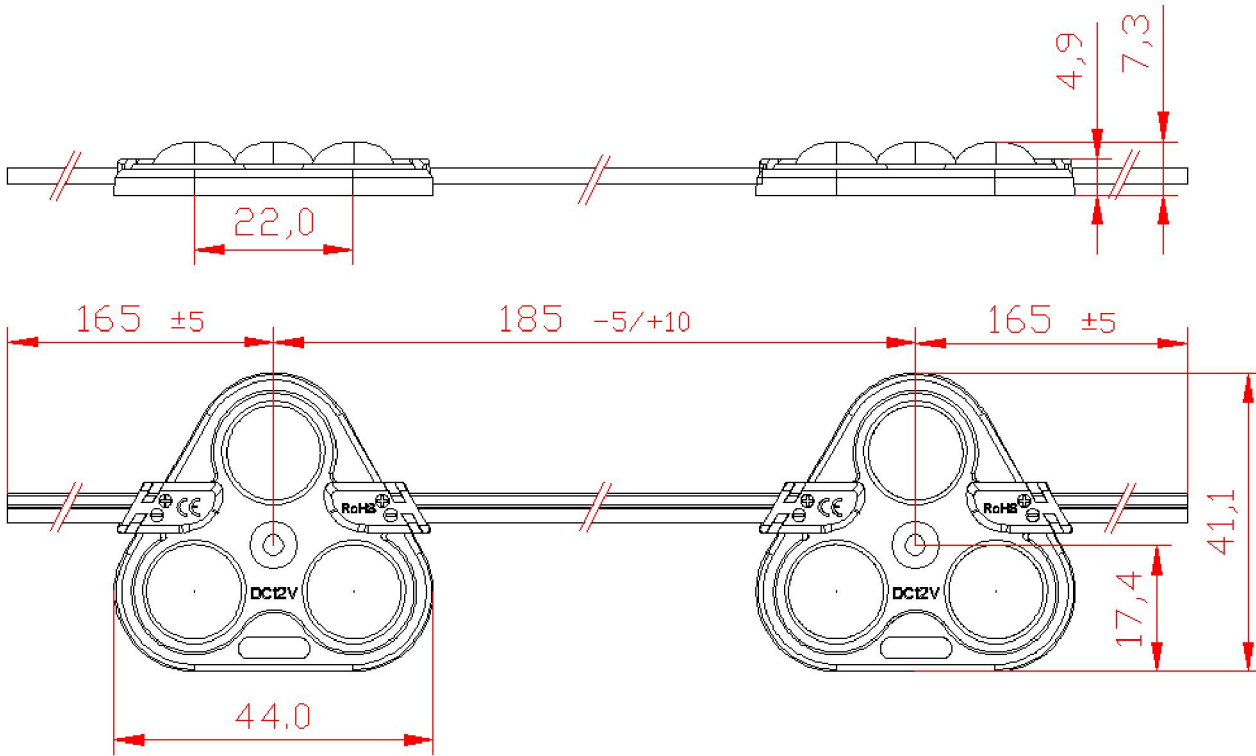
Product Name	Nominal voltage ^③	Color temperature or Wavelength ^{①②}	CRI ^{①②}	Typ. Flux per module ^{①②}	Typ. Power per module ^{①②}	Luminous efficacy
M23GN21A	12.0 V	2700~3300 K	>70	130.0 lm	1.44 W	90.30 lm/W
M23GW21A	12.0 V	5500~6500 K	>70	135.0 lm	1.44 W	94.00 lm/W
M23GW21A	12.0 V	8000~12000 K	>70	135.0 lm	1.44 W	94.00 lm/W
M23GR21A	12.0 V	617~625 nm	Red	26.0 lm	1.20 W	21.67 lm/W

① Tolerance range for optical and electrical data: -15/+15 %.

② All value @ ta=25°C.

③ Tolerance range for the supply voltage: 12 V: ±5 %.

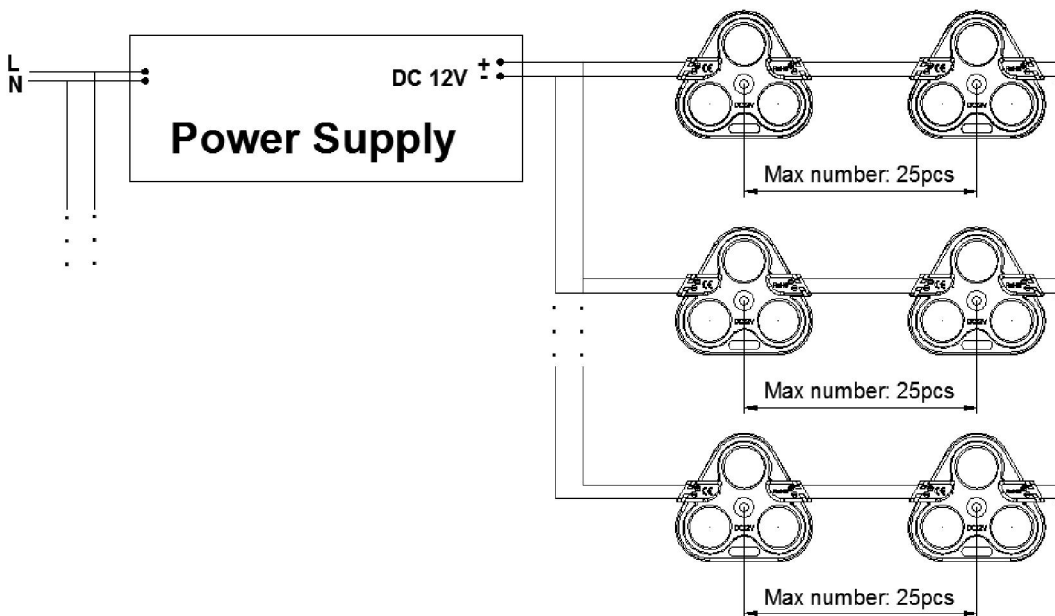
Product 2D drawing (unit: mm)



Wiring type

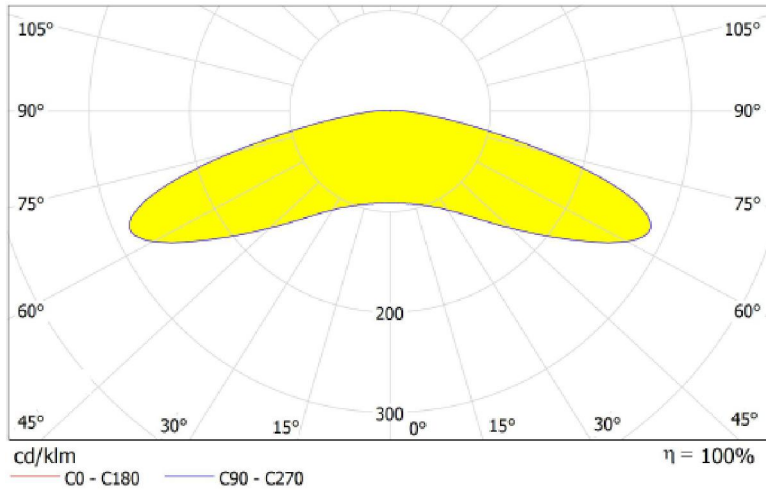
Cable	UL 1007 18AWG	
Color	red - white	white
Function	+	-

Wiring example:



Light distribution

Beam characteristics 160°



Noted:

- The power cable should meet the actual maximum current and power.
- All the end point of wire should be treated with waterproof;
- Pay attention to the maximum number of connections, prohibit overloading.
- All the power supply must has the corresponding certification.
- Our company reserves the right of final interpretation.
- Subject to change without notice.