

Backlighting Injection Module

M23GX03A



Areas of application

- Signage and illuminated advertising.
- Best for 60~80mm depth light boxes and channel letters.
- Permanent outdoor use in enclosed light boxes or channel letters.

Product features

- Chain of 50 pcs LED modules.
- High efficiency LED.
- High color consistency (MacAdam 4).
- Beam characteristic: 160°.
- Protection class of LED module: IP67.
- Flexible chain, can be split between any module.
- Mounting with screw or premounted double-sided adhesive tape possible.
- Nominal life-time up to 50,000 h (at tc 50°C).
- Module size:
72 x 18.5 x 10 mm.

Application data

| | |
|-------------------------------|-----------------|
| Max connection number | 50 pcs |
| Distance of modules (wire) | 200 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/UL/ENEC/RoHS |

Technical data

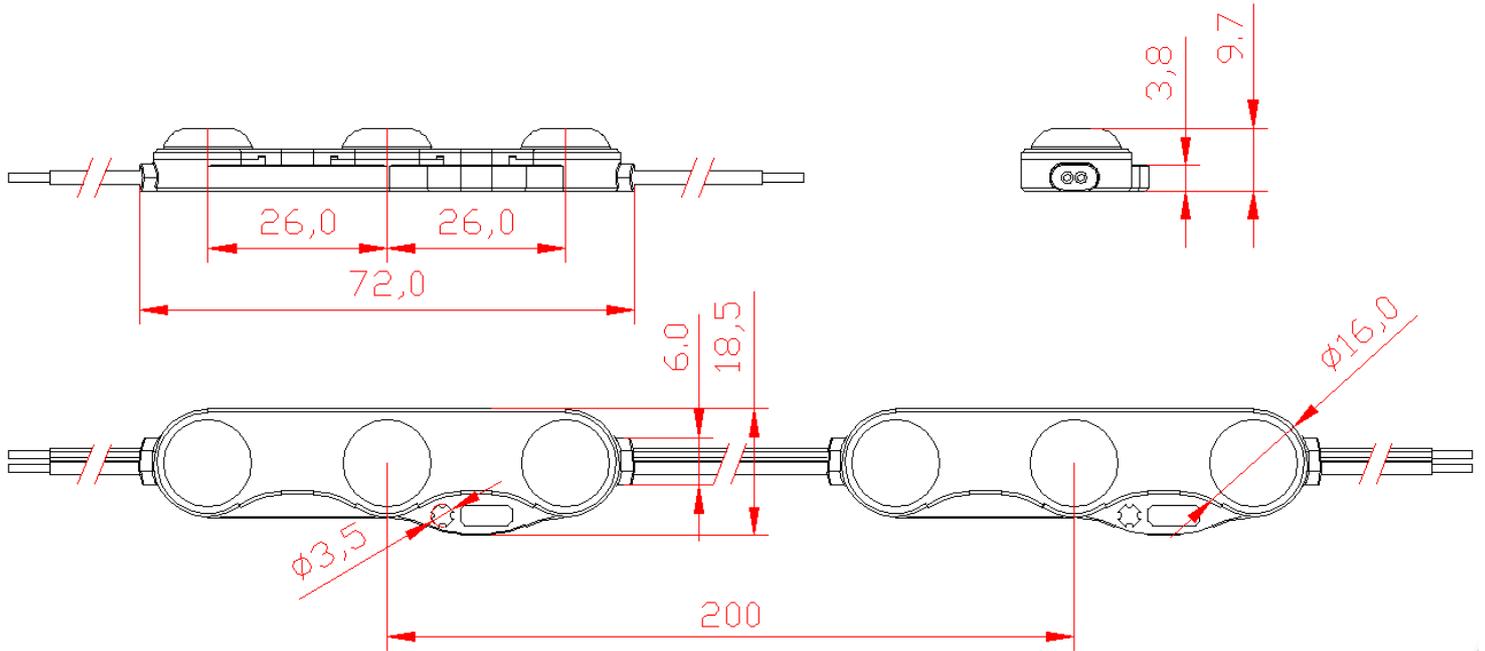
| Product Name | Nominal voltage ^③ | Color temperature or Wavelength ^{①②} | CRI ^{①②} | Typ. Flux per module ^{①②} | Typ. Power per module ^{①②} | Luminous efficacy |
|--------------|------------------------------|---|-------------------|------------------------------------|-------------------------------------|-------------------|
| M23GN03A | 12.0 V | 2700~3300 K | >70 | 135.0 lm | 1.5 W | 90.0 lm/W |
| M23GW03A | 12.0 V | 5500~6500 K | >70 | 145.0 lm | 1.5 W | 96.7 lm/W |
| M23GW03A | 12.0 V | 8000~17000 K | >70 | 145.0 lm | 1.5 W | 96.7 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 %.

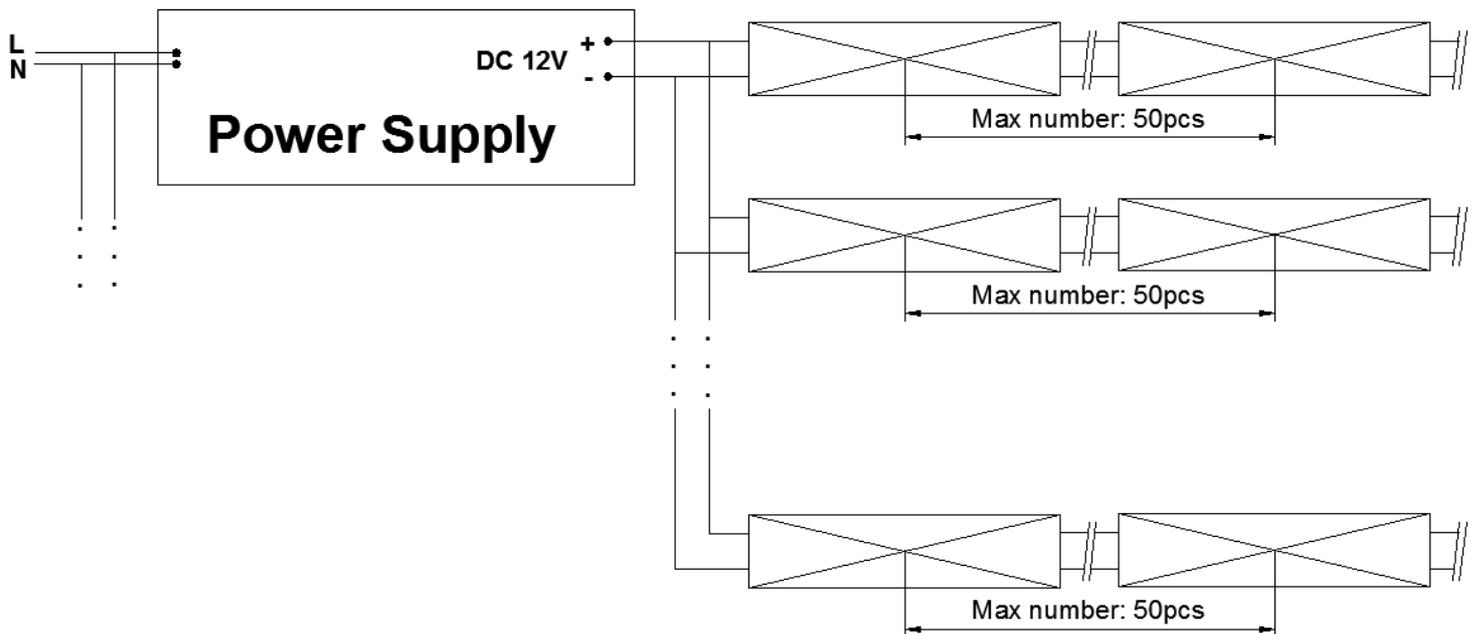
Product 2D drawing (unit: mm)



Wiring type

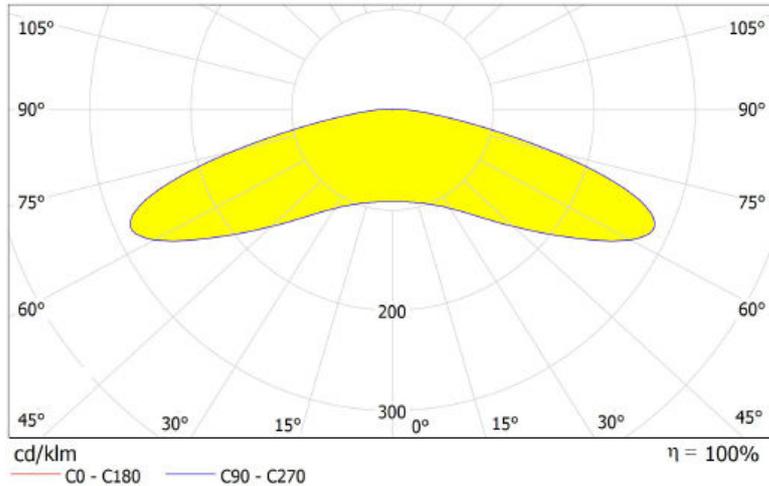
| | | |
|----------|---------------|-------|
| Cable | UL 1007 18AWG | |
| Color | red - white | white |
| Function | + | - |

Wiring example:



Light distribution

Beam characteristics 160°

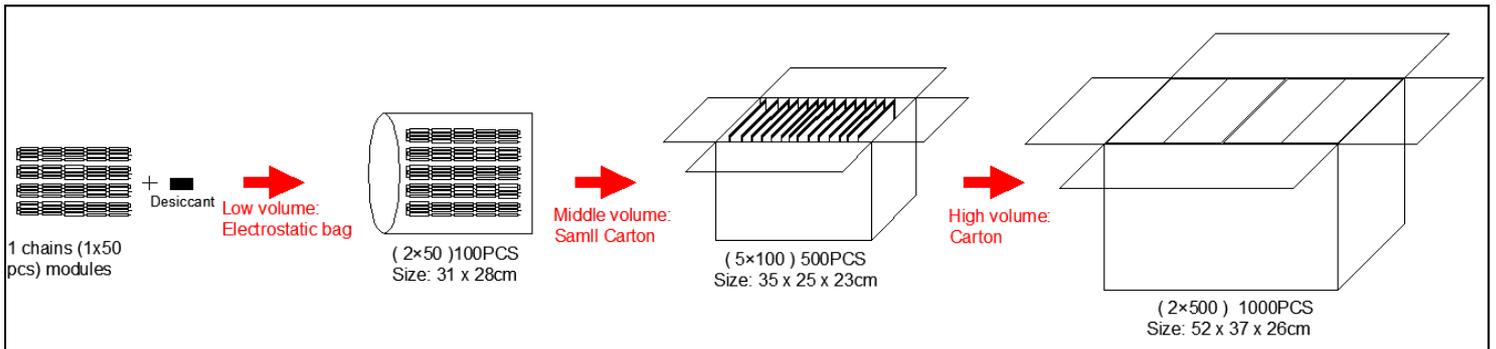


Packaging information

| Product name | Weight per pc.① | Packaging, low volume | | Packaging, high volume | |
|-----------------|-----------------|-----------------------|---------|------------------------|---------|
| M23GX03A | 16.2 g | 100 pc(s). | 1.62 kg | 1000 pc(s). | 18.2 kg |

① Tolerance range for weight: $\pm 10\%$.

Packaging example:



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.