

## Side lighting Injection Module

### M21CX24D



## Areas of application

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

## Product features

- Chain of 20 LED modules with single LED each.
- High efficiency LED.
- High color consistency (MacAdam 4).
- Beam characteristic: 12 x 56°.
- Protection class of LED module: IP66.
- 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  $t_c$  50°C).
- Module size: 72 x 34 x 18.4 mm.

## Application data

|                                  |              |
|----------------------------------|--------------|
| Module number per Chain          | 20 pcs       |
| Max. module number per Chain     | 20 pcs       |
| Distance of modules (wire)       | 135 mm       |
| Ambient temperature $t_a$        | -25 ~ +50 °C |
| Max. temperature on module $t_c$ | 65 °C        |
| Storage temperature $t_s$        | -40 ~ +85 °C |
| Risk group (EN 62471:2008)       | 1            |
| Certification list               | CE/ENEC/RoHS |

## Technical data

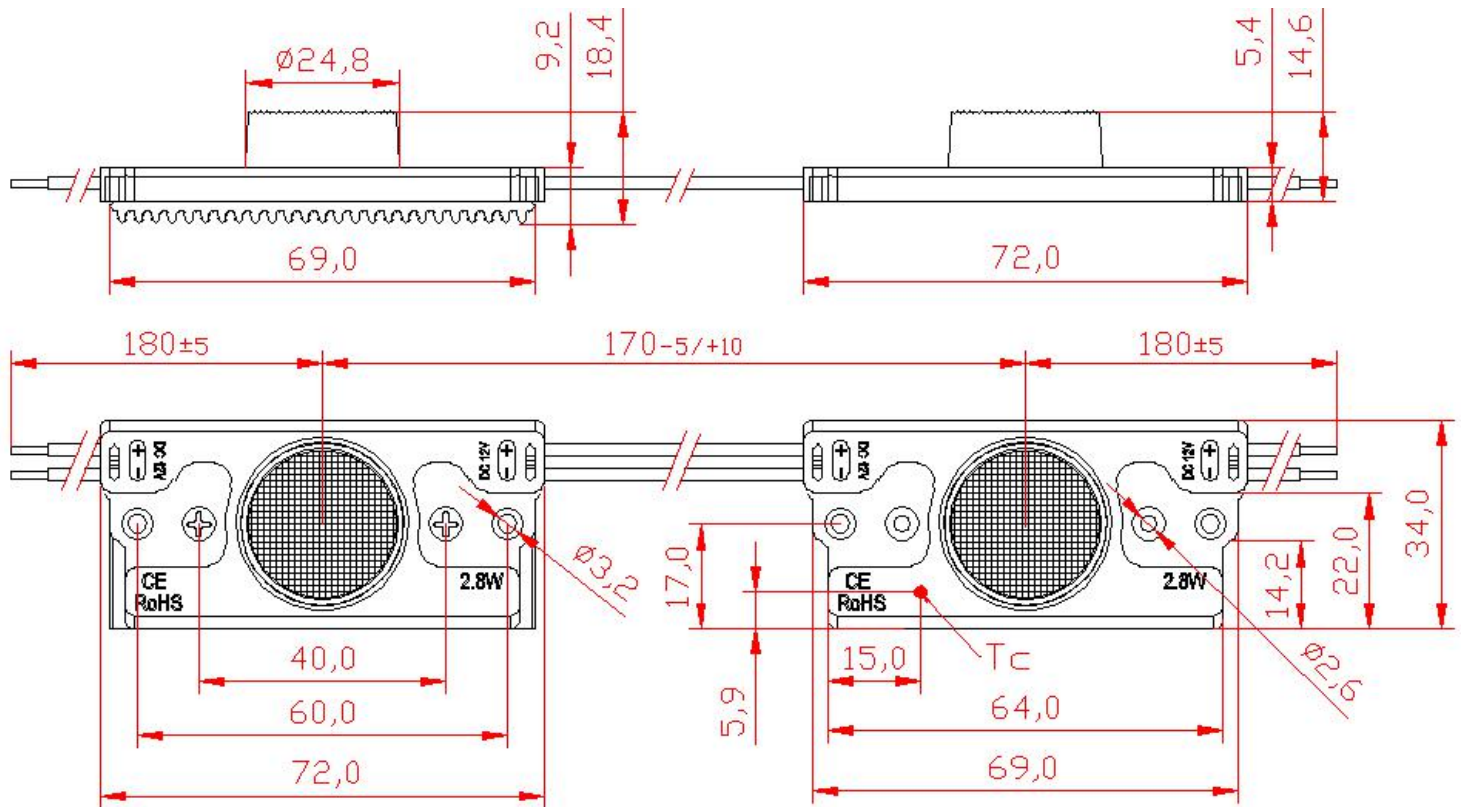
| Product Name | Nominal voltage <sup>③</sup> | Color temperature or Wavelength <sup>①②</sup> | CRI <sup>①②</sup> | Typ. Flux per module <sup>①②</sup> | Typ. Power per module <sup>①②</sup> | Luminous efficacy |
|--------------|------------------------------|---|-------------------|------------------------------------|-------------------------------------|-------------------|
| M21CN24D     | 12.0 V                       | 2700~3300 K                                   | >70               | 220 lm                             | 2.8 W                               | 78.6 lm/W         |
| M21CW24D     | 12.0 V                       | 3800~4300 K                                   | >70               | 240 lm                             | 2.8 W                               | 85.7 lm/W         |
| M21CW24D     | 12.0 V                       | 6000~7000 K                                   | >70               | 240 lm                             | 2.8 W                               | 85.7 lm/W         |

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

② All value @  $t_a=25^{\circ}\text{C}$ .

③ Tolerance range for the supply voltage: 12 V:  $\pm 5\%$

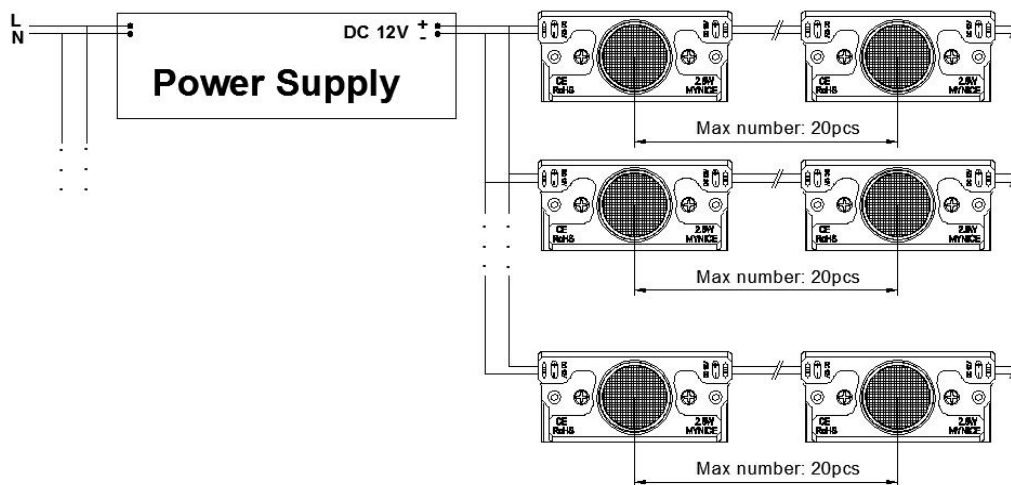
## Product 2D drawing (unit: mm)



## Wiring type

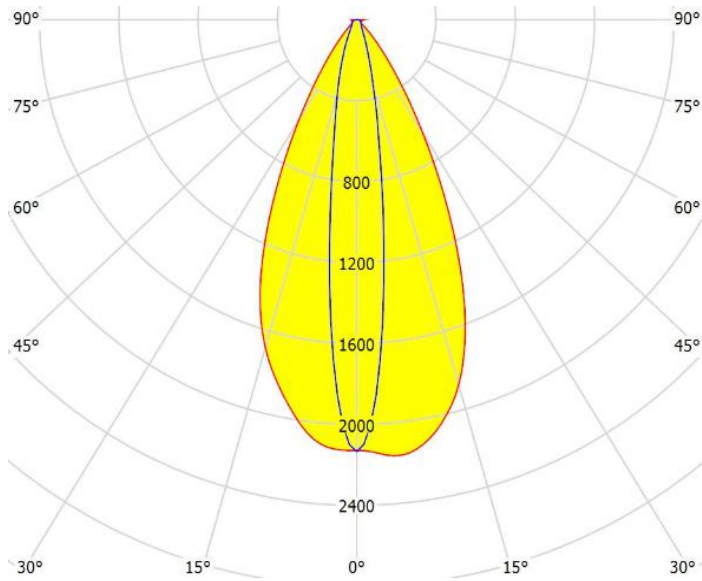
|          |               |       |
|----------|---------------|-------|
| Cable    | UL 1007 18AWG |       |
| Color    | red - white   | white |
| Function | +             | -     |

## Wiring example:



## Light distribution

### Beam characteristics 12 x 56°



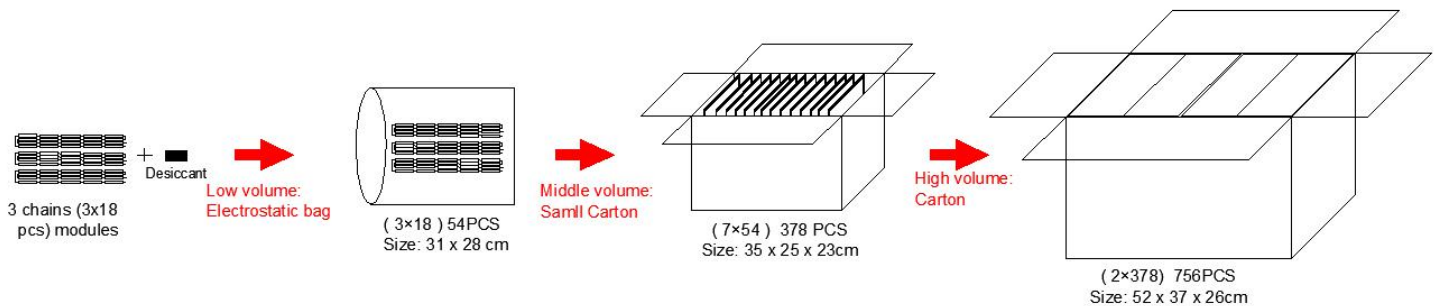
## Packaging information

| Product name | Weight per pc.①② | Packaging, low volume |         | Packaging, high volume |         |
|--------------|------------------|-----------------------|---------|------------------------|---------|
| M21CX24D     | 36.0 g           | 54 pc(s).             | 1.95 kg | 756 pc(s).             | 23.3 kg |

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

② With Heatsink.

### 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.