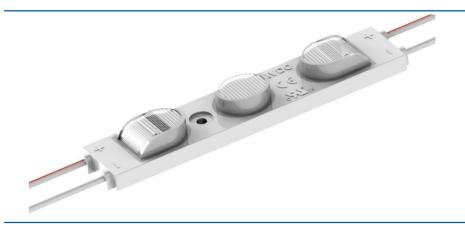
Product datasheet





BoxSide Small Plus

- M23EW30D

Areas of application

- Signage and illuminated advertising
- Side-lighting of thin and small light box, best for more than 60mm depth (> 2.4 inch)

Product benefits

- Uniform and efficient illumination at high module pitches thanks to innovation optics design arc lens
- Excellent optical design can meet long light box uniformity requirement best for thin and small light box
- Long lifetime (powered by OSRAM LED) 7 years warranty

Product features

- 12VDC
- 140 lm/module
- 106 lm/W
- Beam angle 11° x 40°
- CE marked and UL listed









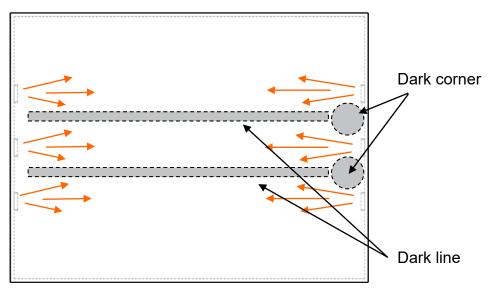


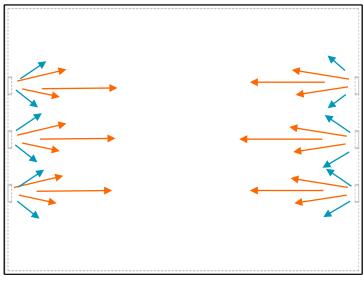






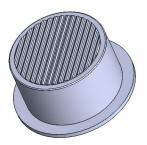






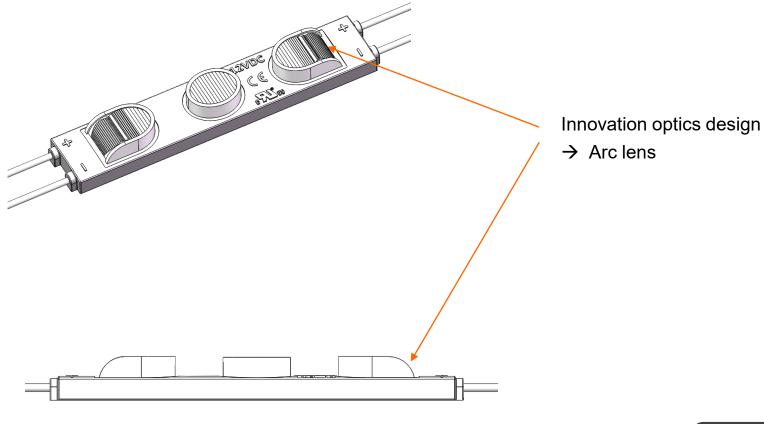
Normal sidelighting optics design

Innovation sidelighting optics design



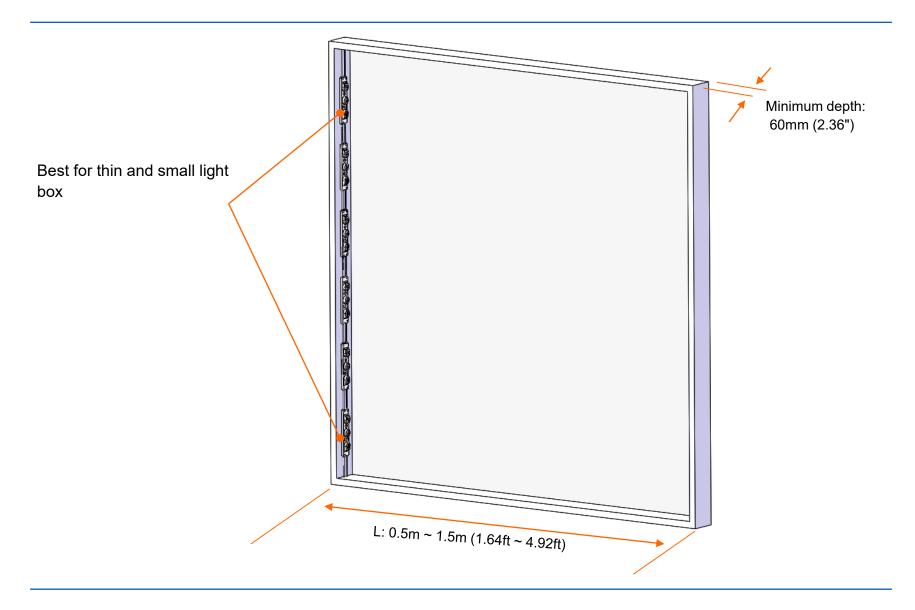














Electrical data

| Product Description | Typical Voltage | Energy Consumption (W/module) | Energy Consumption (W/chain) | Energy Consumption (W/ft.) | Power Supper Loading | Additional Information (modules/chain) |
|------------------------|--------------------|-------------------------------------|------------------------------------|----------------------------------|-----------------------------|--|
| M23EW30D | 12VDC | 1.32 | 52.8 | 2.2 | 45 modules/60W 26.8 ft./60W | 40 |

Photometrical data

| Product Description | Light color (designation) | Color (CCT, wavelength) | Color Rendering Index | Typical Brightness (lumen/module) | Typical Brightness (lumen/chain) | Typical Brightness (lumen/ft.) |
|------------------------|---------------------------|-------------------------------|--------------------------|--------------------------------------|-------------------------------------|-----------------------------------|
| M23EW30D | White | 3000K-7000K | Ra > 80 | 140 | 5600 | 237 |



Environmental and Application Conditions

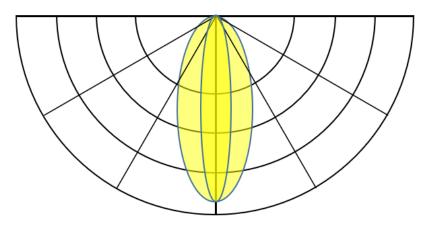
| Operating Environment (t _a) | -25°C to +55°C | | |
|--|----------------------------------|--|--|
| Storage Temperature Range (t _s) | -40°C to +85°C | | |
| Max. operating (case) temperature (t_c) | 75°C | | |
| IP Rating | IP67 | | |
| Lifetime (L70B50) | 70,000 hours | | |
| Dimming mode | Dimmable | | |
| Cutting Resolution | Cut on wire between every module | | |

Maximum Supply Wire Limits

| 30W | 22 modules | 4 m (13.4 ft.) |
|------|------------|-----------------|
| 60W | 45 modules | 8 m (26.8 ft.) |
| 80W | 60 modules | 11 m (35.8 ft.) |
| 100W | 75 modules | 14 m (44.7 ft.) |
| 120W | 90 modules | 16 m (53.7 ft.) |

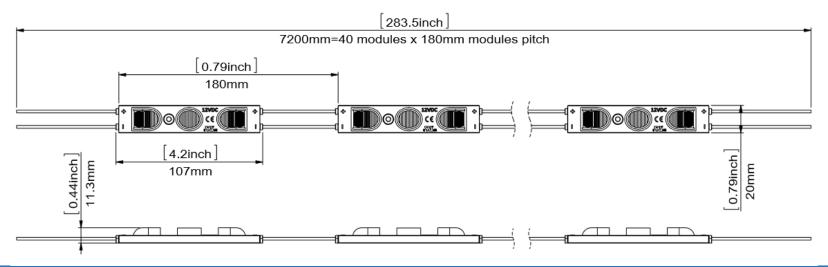


Light distribution



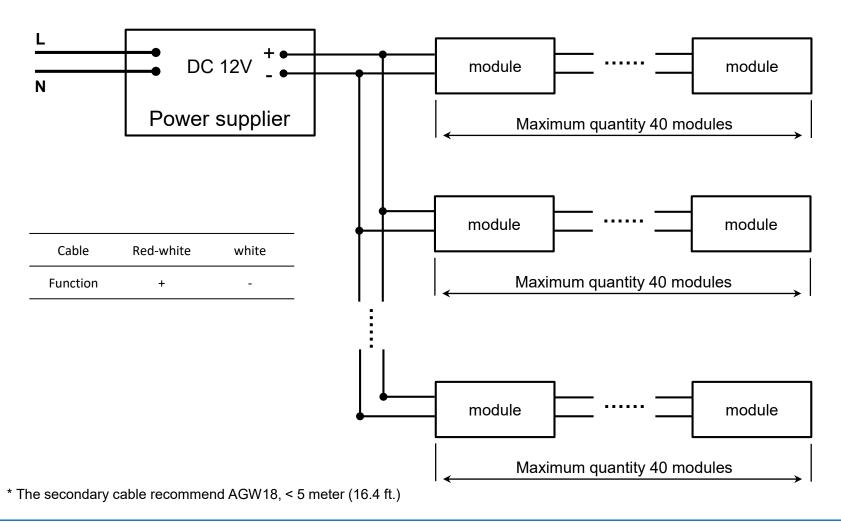
11° x 40°

Product line drawing





Wiring method





Package

| Product description | Package unit (modules/carton box) | Package unit (chains/carton box) | Carton box Dimensions (length x width x height) | Volume | Gross weight |
|------------------------|-----------------------------------|----------------------------------|---|--------|--------------|
| M23EW30D | | | | | |

Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is discouraged. Unbalanced
 voltage drop in serial connection can cause hazardous overload
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- LED modules are dimmable by means of PWM (pulse width modulation).