

Product Technical Datasheet



Spark Intra

- M31210707-SS

Areas of application

- Signage and illuminated advertising.
- Back-lighting for medium light box, channel letter.
- Best for 50mm ~ 150mm (2~8inch) depth.

Product main benefits

- Uniformity optical performance at high LED module distance thanks to excellent lens design.
- 1 W/module.
- 5 years warranty.
- 100 lm/module (6500K).



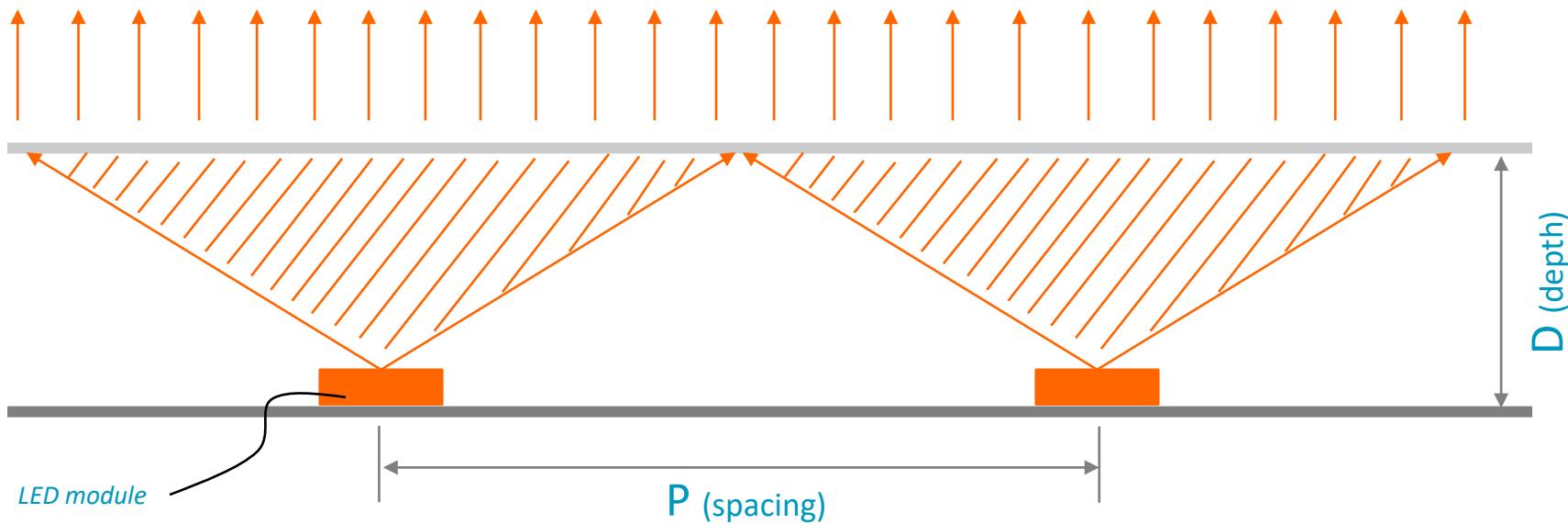
LM-79
TESTED

LM-80
TESTED



LUMILEDS

Optics Technology (wide light spot)



$$\text{optical performance proportion} = \frac{D(\text{depth})}{P(\text{spacing})} = 1:3$$

- The proportion of “P” and “D” can show the performance of lens optics design.
- The bigger proportion, the wider light spot.
- The proportion is for reference from lab, actual layout need based on real application.

Electrical and Photometrical data

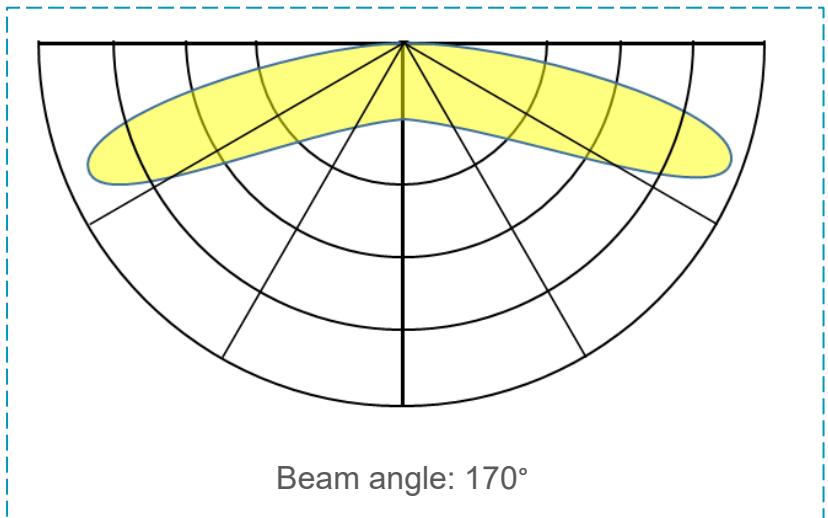
Electrical data	Part Numbers	Typical Voltage	Energy Consumption		Additional Information	
Spark Intra	M31210707-SS	12VDC	1 W/module	30 W/chain	2 W/ft.	30 modules/chain
Photometrical data	Part Numbers	Light color (designation)	CCT	Typical Brightness		
Spark Intra	M31210707-SS	White	5000K/6500K	100 lm/module	3000 lm/chain	203 lm/ft.

Remark:

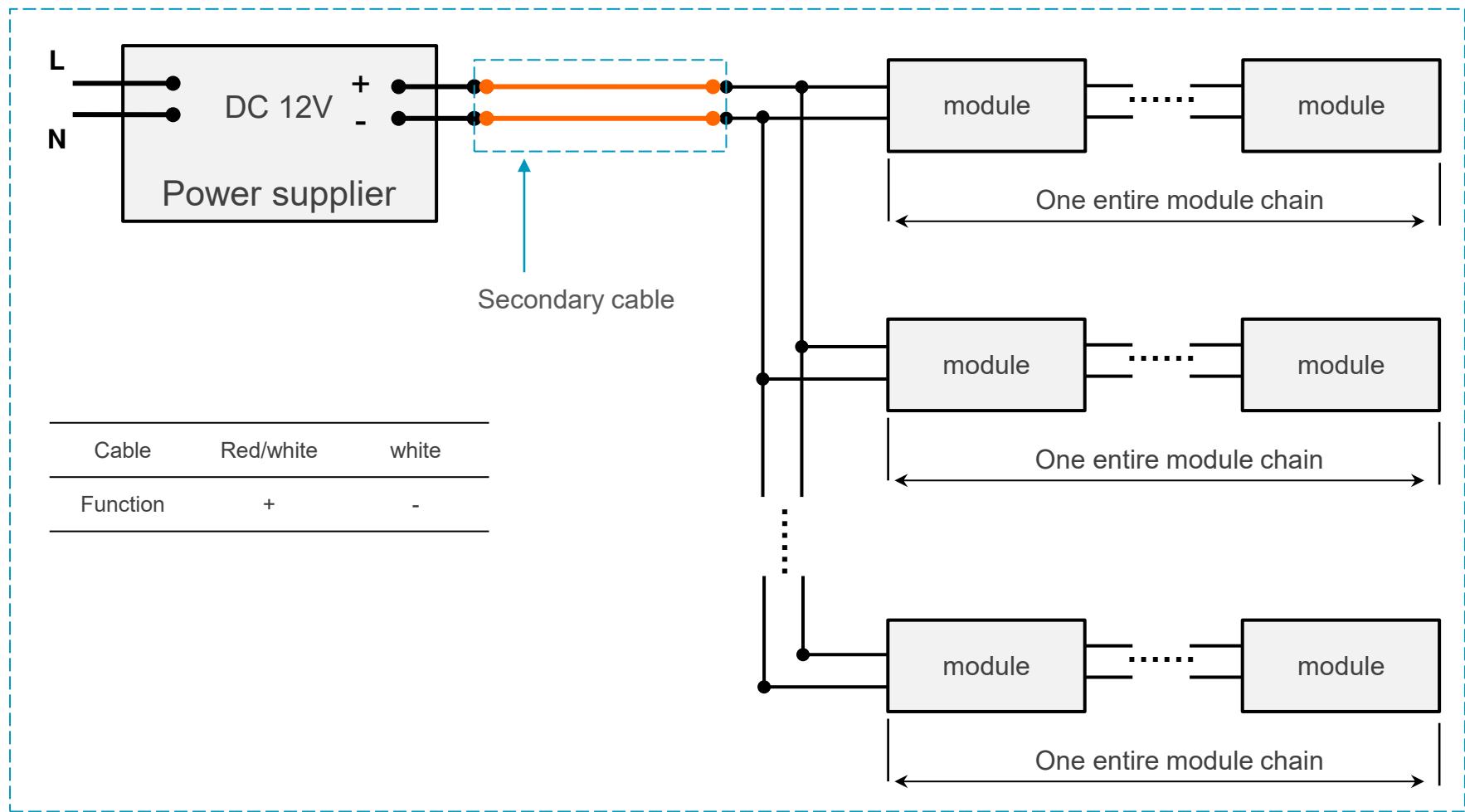
1. Ranking at $t_a = 25^\circ\text{C}$.
2. Constant voltage design.
3. Tolerance of measurements for power/lumen are $\pm 10\%$.

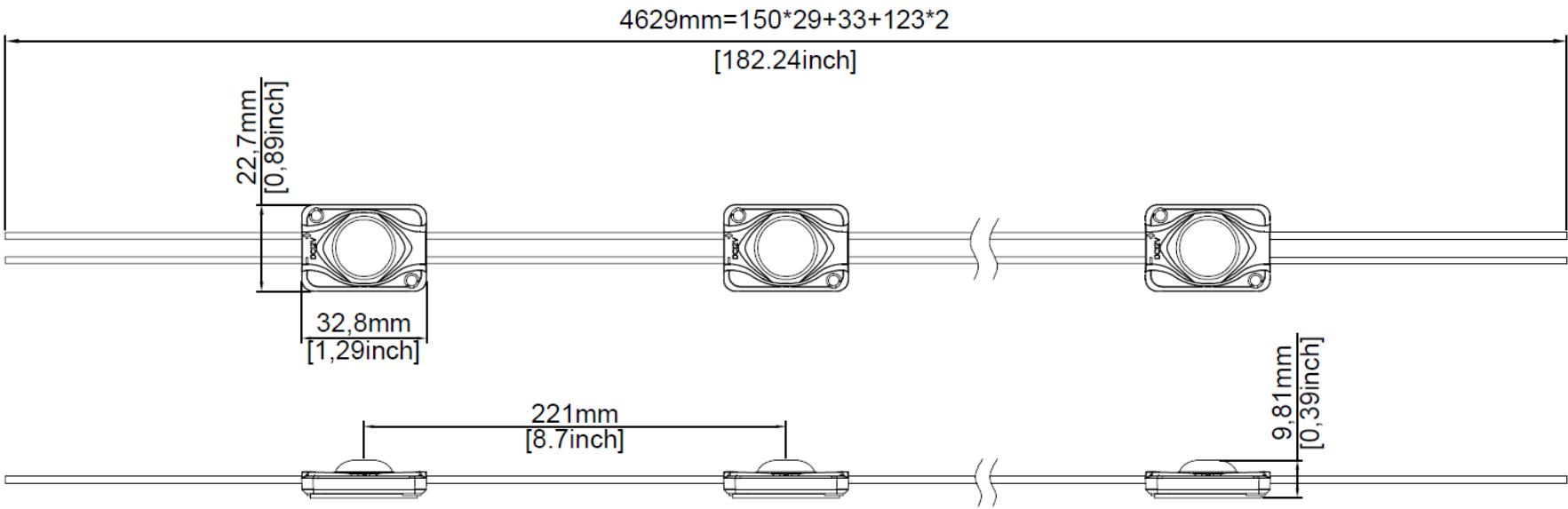
Application Conditions and light distribution

Operating Environment (t_a)	-25°C to +60°C
Storage Temperature Range (t_s)	-40°C to +85°C
IP Rating	IP66
Lifetime (L70B50)	5 years
tc temperature	80°C
Dimming mode	Dimmable
Cutting Resolution	Cut on wire between every module



Wiring method





Package and additional information

Products	Part Number	Package unit (modules/carton box)	Carton box Dimensions (length x width x height)
Spark Intra	M31210707-SS		52 x 37 x 26 cm

Additional 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).
- During installation, it is highly recommended to install modules with screws to ensure long-term stability. Other means of securing modules(sealant, vinyl, etc.) are also acceptable.