

Characteristic

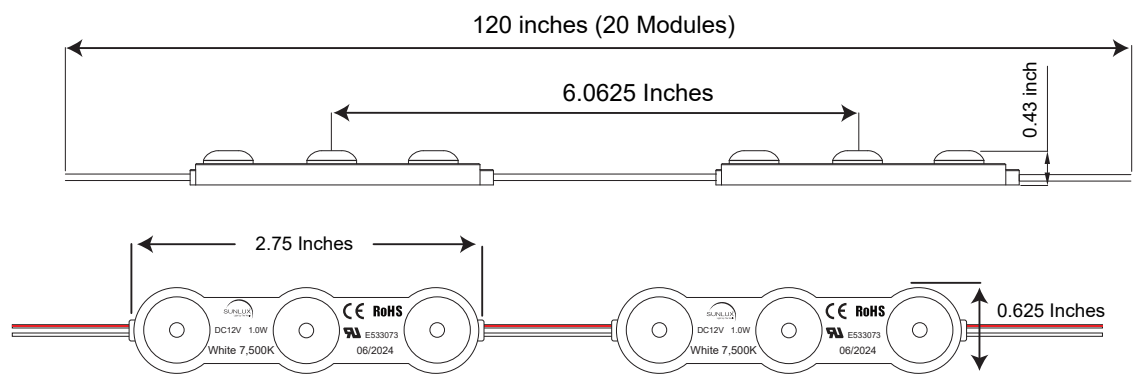
High Efficiency	IP68
Single-Bin SMD2835	UL US E547958
DC12V	CE
60,000H LIFETIME	RoHS
Wide Angle 170°	FC



Recommended for channel letter. 3" to 8" from LED to face

- High Luminous Efficacy LED Module Solution for Signage and Cabinets
- Electrical and material safety certified (UL, CE and RoHS Certificates)
- Industry-leading, single-bin SMD2835 LED chips
- Ultra Sonic Welding Technology provides extreme weather protection (IP68)
- Secure and easy fastening with genuine double coated tissue 3M adhesive
- Guaranteed lifetime of more than 60,000 hours (L70)
- High strength polycarbonate lens + ABS plastic body for harsh environments
- Fully integrated 170° optical lens for wide and evenly distributed light

Physical



Optical Characteristic

Color	Current Dissipation (mA)	Power Consumption (Watt)	Luminous Flux (lm)	Luminous Efficiency (lm/W)	CCT (Kelvin)	Viewing Angle
White	83	1.0	170	170	7,500K	170 (2Θ½)
Warm White	83	1.0	170	170	3,000K	170 (2Θ½)

Electrical Characteristics

Current dissipation: 83mA
 Operating power: DC 12V
 Maximum quantity for serial connection: 20 modules.
****Connecting more than 20 modules in series will result in unstable brightness**
 Supports 12V dimming

Thermal

Heat dissipation: Ambient air
 Operating ambient temperature: -4° F to 140° F
 Storage ambient temperature: -4° F to 140°F

Waterproof Rating

IP68: Complete protection against dust and moisture. Immersion up to 1 meter under - defined condition of pressure and time.

Construction

LED type: SMD 2835
 Body, Lens, PCB: ABS, PC and FR-4
 Cable: UL, AWM2468 20AWG 300V E493542
 Pre-mounted 3M adhesive tape and screwing hole for mechanics fastening

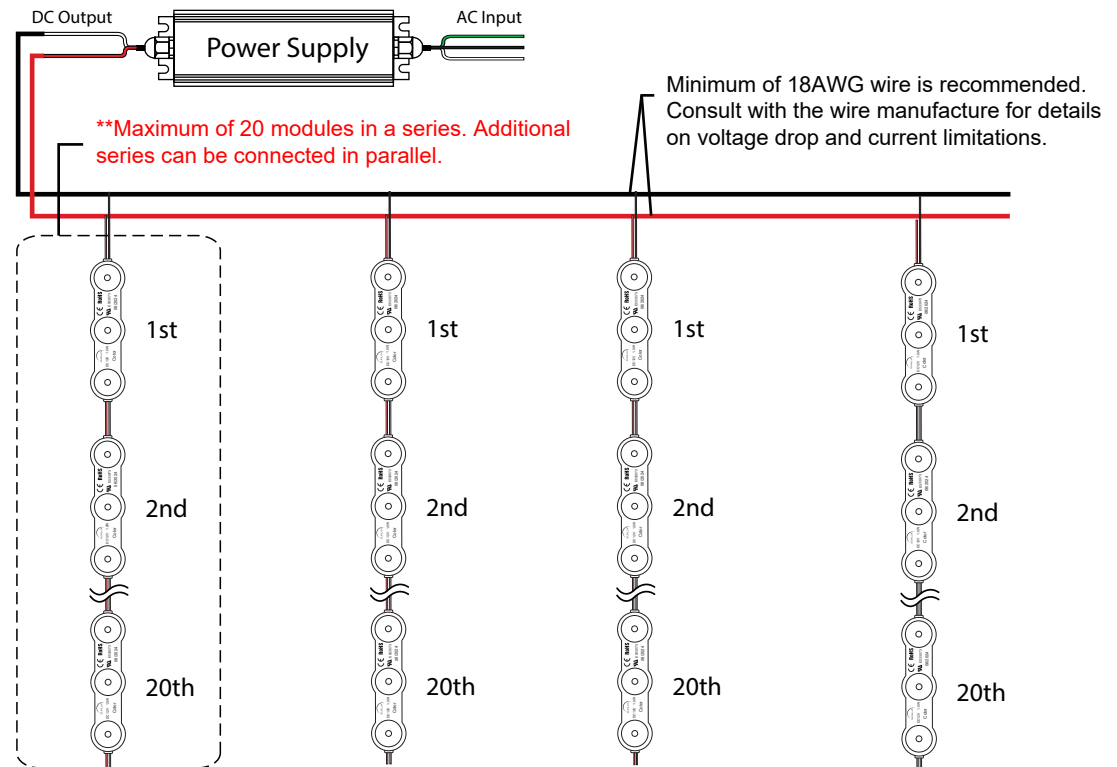
Approval

EN 55015/A2: 2009
 UL879 -U.S Standard for Electric Sign Components
 C22.2 No. 207-M89-Canadian Standard for Portable and Stationary Electric Signs & Displays
 RoHS Directive 2011/65/EU

Packaging

Anti-static vinyl bag: 100 modules (50 feet)
 Master carton box: 1500 modules (15 vinyl bags, 750 feet)

Wiring Guide



Power Supply Load Table**

Power Consumption	Safety Factor	Power Supply* (watt) / Qty (pcs)				
		60W	120W	150W	200W	320W
1.0 Watt	80%	48	96	120	160	211
	90%	54	108	135	180	238

*Check power supply specification/data sheet for the temperature and line derating curve.
 **This table is generated with a Safety Factor (SF) of 1.15 (80% and 90% load).