



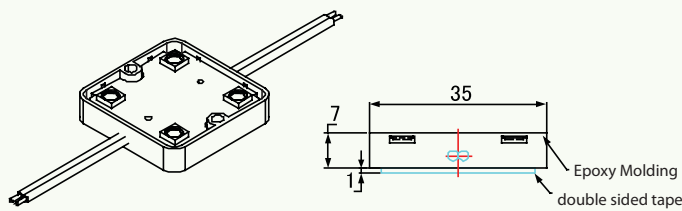
**MAXIMUM COST-EFFECTIVE LIGHTING SOLUTION**

The STAR N04 is transparent LED module lighting system perfect for those of who need maximum lighting output at lowest cost. With output of 67LPW, lumen per watt, the STAR N04 is clearly visible from far distance and even in daylight, making it is highly suitable for large-scale application. While maintaining its extreme energy efficiency, it also provides reliable assurance with Samsung LED technology that lighting output remains 70% level out of initial output after using 42,500 hours. Please, let us welcome you to our hassle free lighting system.

- Guaranteed life time up to 42,500 hours with 70% lighting output  
\*24 hour constant load may result less operating hours with lower lighting output. Estimated lifetime is based on normal usage of 10 hours per day.
- Uniform color temperature by strictly controlled system of bin rank
- Extremely small and light solution for low-profile channel letters, hidden recessed lighting
- 70% more energy efficiency compared to conventional sign lighting source
- Quality and reliability assured

**PHYSICAL**

Length : 35mm  
 Width : 35mm  
 Thickness : 7mm  
 Weight : 14g  
 Lamp Pitch : 22 mm (0.79 in., 4 LED Lamps)  
 Module Pitch : 135mm



**OPTICAL CHARACTERISTICS**

Available Color	Luminous Flux(lm)& Luminous Intensity(cd)			Dominant Wave Length & Color Temperature			Viewing Angle 2Θ <sub>1/2</sub>
	Min	Typical	Max	Min	Typical	Max	
Cool White	57.6lm	80.6lm	80.6lm	9,000K	10,000K	11,000K	120
Daylight White	59.9lm	82.9lm	82.9lm	5,000K	6,500K	7,000K	120
Neutral White	59.9lm	82.9lm	82.9lm	4,000K	4,200K	4,400K	120
Warm White	51.8lm	74.8lm	74.8lm	2,700K	3,000K	3,200K	120
Red	2.1cd			620nm		625nm	120
Green	7.0cd			525nm		530nm	120
Blue	0.88cd			455nm		460nm	120

\*CRI (Color Rendering Index) for white product types is 70 / \*Luminous Flux measuring equipment is CAS140B  
 \*Viewing angle is the off axis angle from lamp centerline where the luminous intensity is half of the peak value / \*CCT 5% tester tolerance  
 \*Dominant wavelength is derived from the CIE 1931 Chromaticity diagram and represents the perceived color  
 \*Color temperature for white is strictly controlled by bin rank system and it consists of three ranks which should not be used simultaneously.

### ELECTRICAL CHARACTERISTICS

Current dissipation : 110 mA(Colored:70mA)  
 Power Consumption : 1.32 W(Colored:0.84W)  
 Operating power : DC 12V  
 Quantity for maximum connection in serial : 50 modules  
 Electronic dimming control supported

### THERMAL

Cooling : Ambient air  
 Maximum operating temperature : 40°C  
 Minimum operating temperature : -20°C  
 Maximum storage temperature : 60°C  
 Minimum storage temperature : -30 C

### SAFETY FEATURES

IP65 : Prevents water & dust penetration  
 Nonpolar Voltage Protection : STAR N04 is nonpolar DC powered device

### CONSTRUCTION

White LED Lamp : Single-Die chip, 5252  
 Color LED Lamp : Double-Die chip, 5252  
 Body : ABS case filled with transparent Epoxy resin  
 Lead wire : 18AWG

### APPLICATIONS

Channel letters - open & closed cover  
 Reverse halo lighting  
 Border lighting  
 Point-Of-Purchasing signage  
 Art & sculpture and cove lightin  
 Facade lighting

### APPROVAL

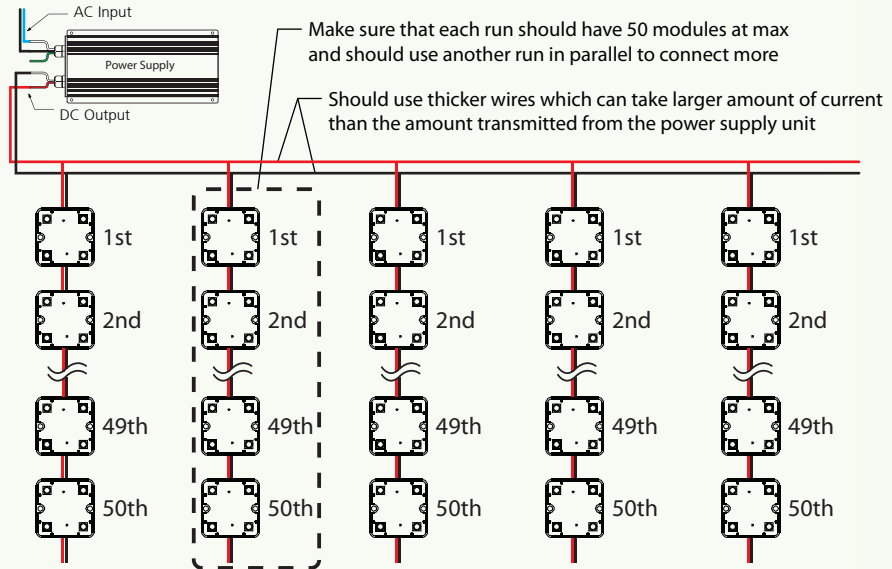
EN 55015/A2 : 2009  
 EN 61547/2009  
 EN 62031/2008  
 EN 62471/2006



### FEATURES



### WIRING GUIDE



### LOADING

PSCV03012(30W, IP65) : 19modules(2.57meter, 8.43feet)  
 PSCV06012(60W, IP65) : 39modules(5.27meter, 17.29feet)  
 PSCV12012(120W, IP65) : 77modules(10.40meter, 34.12feet)  
 PSCV30012(300W, IP22) : 193modules(26.06meter, 85.50feet)  
 PSCV60012(600W, IP22) : 386modules(52.11meter, 170.96feet)  
 All footage based on 85% of rated capacity

### PACKAGING

Anti-static gray-colored vinyl bag : 50modules(6.75meter, 22.15feet)  
 Master carton box : 700modules(14 vinyl bags, 94.50meter, 310.00feet)

Specifications subject to change without notice