

The BriLux™ V3 is latest member of V series high power LED based MR16 lamp that utilizes the Cool Beam Technology™, offering a more economical, high performance and yet thermally stable spotlight.

BriLux™ V3 series is a member of our “Cool Beam Technology” solutions, specially designed for high performance and maximum light intensity. The V3 series features three pieces of 3W power LED; stylish aluminum housing not only provides a fancy look of the future, but also a sophisticated heat sink as it makes heat dissipating more efficiently. BriLux™ V3 series MR16 retrofits into standard MR16 fixtures and housings, hence enables immediate replacement without any additional adjustments.

The lamp features standard MR16 bi-pin connectors and molded aluminum housing with chrome or frosted finish. The BriLux™ V3 series is available in 4W power rating. They are also available in two distinct white Kelvin temperatures: 3500K and 6000K. Other custom colors are also available.

The V3 series utilizes the Brilliance Technologies’ Cool Beam Technology specifically developed for driving high power (up to 5W) solid state devices. It uniquely allows heat to dissipate efficiently; making the product thermally stable for long hours of operation and last much longer than conventional LED based MR16.

BriLux™ V3 series MR16 is equipped with optical grade polycarbonate collimator that allows highest light transmission at 30° beam angle.



Features


- **Light source: 3X2W power LED**
- **Source life: More than 30,000 hours**
- **Low heat, no UV or IR light radiation**
- **Full range of colors**
- **Homogeneous illumination**
- **Sleek designed heat fins with excellent thermal efficiency**
- **6W MR16 can achieve directional light output equal to 50W halogen lamp yet consume 80% less power**
- **Reverse polarity protection**
- **Safety Standard: CE and RoHS**
- **Works with 12V AC/DC lighting systems**

Typical Applications

- **Landscape Accent/Spot lighting**
- **Architectural Lighting**
- **Display Case Accent**
- **Artwork Lighting**
- **Mood Lighting/General lighting**
- **Amusement Park Accent**



PRODUCT SPECIFICATIONS

LIGHT SOURCE	3X3W power LED
OPTICS	3X optical grade PC lens
LENS DIAMETER	17.8 mm/each
BEAM ANGLE	30° (Wide Spot)
RENDERING INDEX (Ra)	>70 (for white color)
TOTAL LENGTH	50 mm (including pins)
WEIGHT	65 g
HOUSING	Molded aluminum with silver paint finish, 5 cm (2") diameter
BASE	GX5.3 pins
DIMMERBILITY	Not Dimmerble 

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 50°C to 70°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or DC
POWER CONSUMPTION	5.5W
TRANSFORMER	Low voltage magnetic to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)

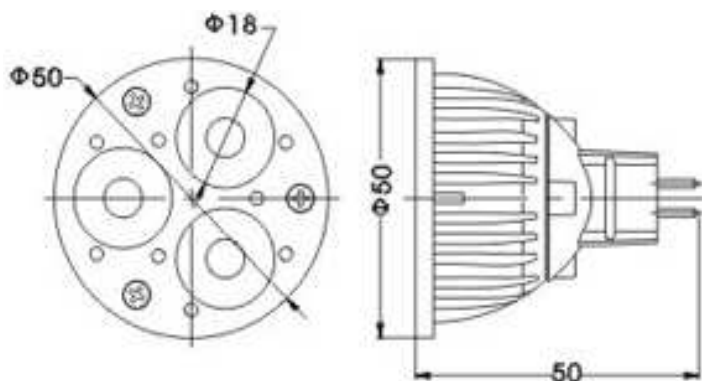
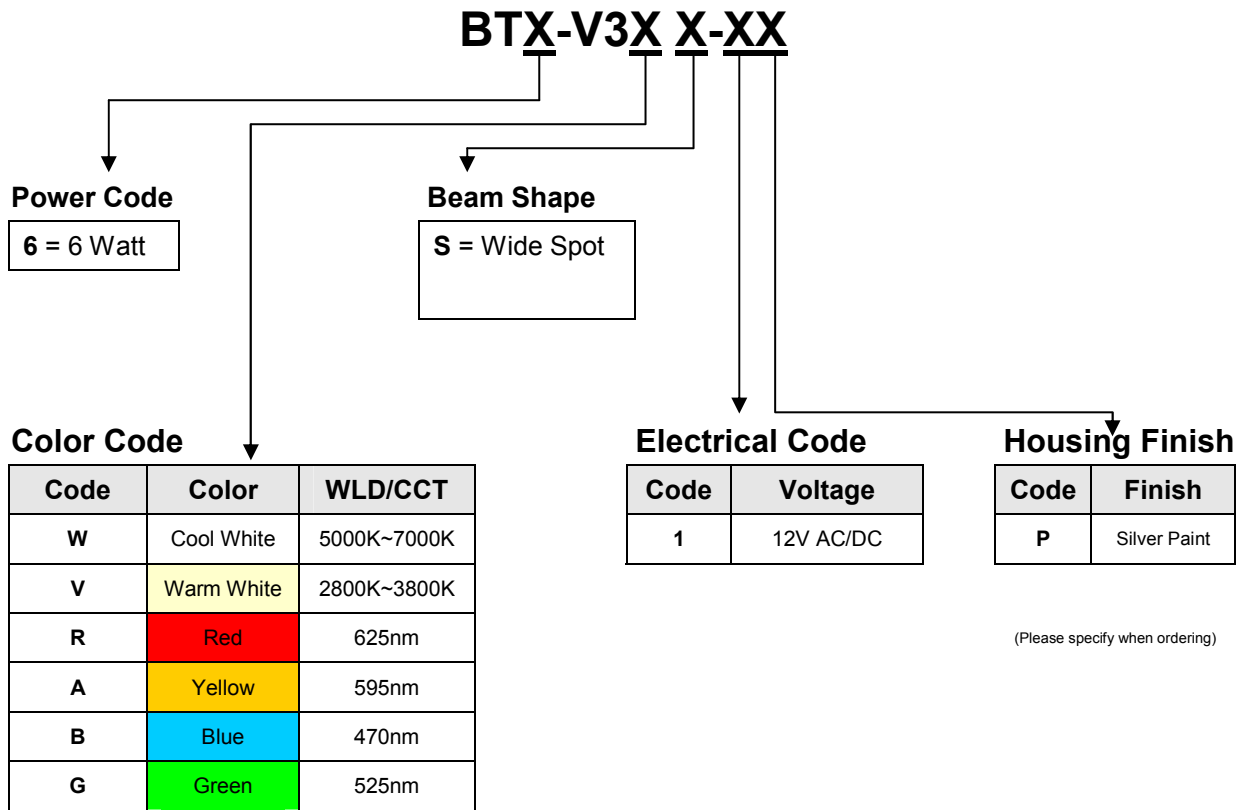


Fig 1. MR16 top view

Fig 2. MR16 side view

PRELIMINARY

PRODUCT ORDERING CODE



3X2W MR16 PRODUCT CODE

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage	LED Power (W)	Typ. Luminous Flux (lm)	Typ. Center Illuminance @ 1m (Lux)	BEAM ANGLE
BT6-V3WS-1P	Cool White	5000K~7000K	12V AC/DC	3X3W	190 lm	1000	30° ±2°
BT6-V3VS-1P	Warm White	2800K~3800K			180 lm	910	
BT6-V3RS-1P	Red	625 nm			210 lm		
BT6-V3AS-1P	Yellow	595 nm			210 lm		
BT6-V3BS-1P	Blue	470 nm			60 lm		
BT6-V3GS-1P	Green	530 nm			240 lm		

Illumination Characteristics ($T_a=25^\circ\text{C}$)

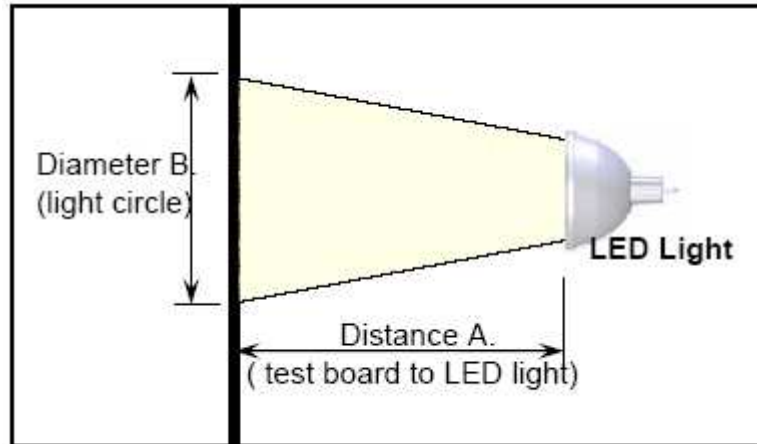


Fig 1. Set up for Illuminance Measurement

3X2W Model

Distance		Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
50	45	4500	3600				
100	86	1000	910				
150	128	250	240	-	-	-	-
200	160	120	110	-	-	-	-

Note: Center beam lux is measured with Digital Lux Meter (Model TES-1334A)

Typical Electrical Characteristics at $T_a=25^\circ\text{C}$

3X2W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V_{AC}	10	12	14	V
Input Voltage (DC)	V_{DC}	9	10	12	V
Individual LED Forward Current	I_F	—	480	—	mA
Estimated Life [□]		—	30,000	—	hours
Optimized Body Temp (3X1W LED)	T	—	55	60	$^\circ\text{C}$

Note[*]- Manufacturer projects V3 spotlight made with power LED to maintain an average of 70% lumens Maintenance after 30,000 hours. This estimation is made based on data from LED manufacturer.

Optional Cable Accessories

1) MR16 Connector without clip – Part No.: 21101

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



2) MR16 Connector with spring clip – Part No.: 21105

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



Optional Power Supply (Recommended for LED MR16 lamps)

1) 60W Ferro Magnetic Power Supply – Part No.: PS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: AC12V

Output Current: 5A max

Power: 60W max

Weight: 1.2Kg

Casing Size: 120X80X65 mm

Remarks: Other wattages is available, please inquire with our sales associates



2) 60W Switching Power Supply – Part No.: SS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: DC12V

Output Current: 5A max

Power: 60W max

Weight: 0.5Kg

Casing Size: 150X96X40 mm

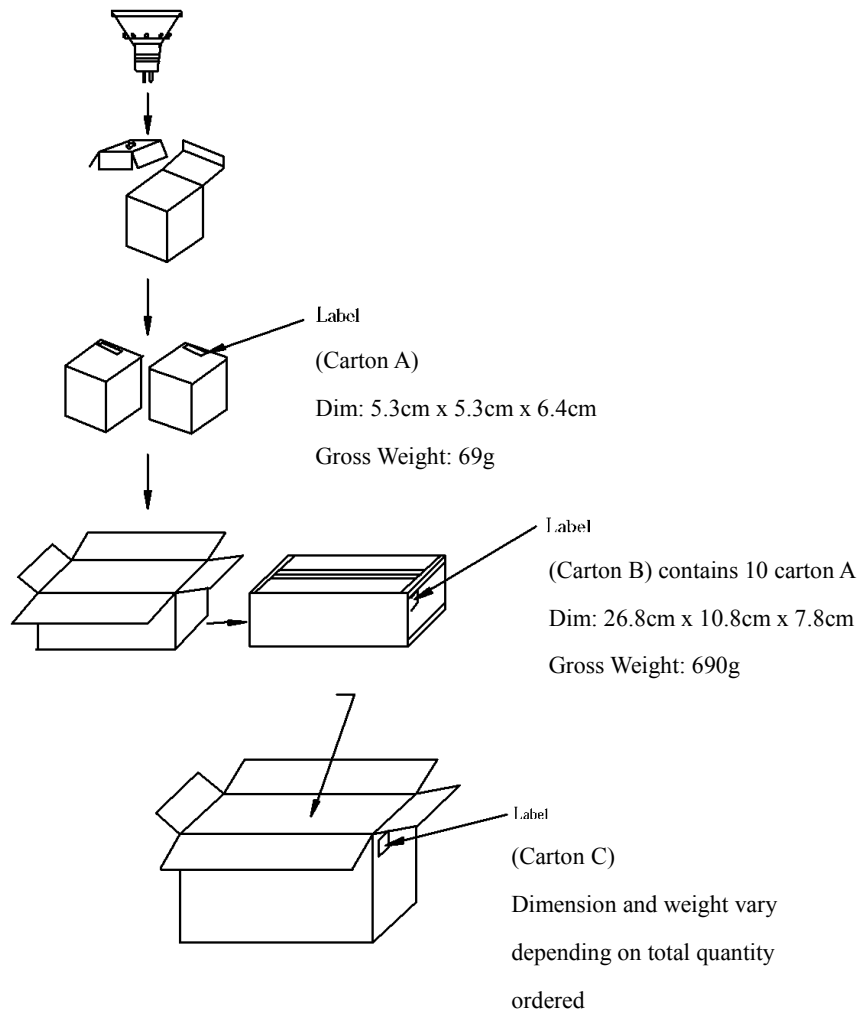
Remarks: Other wattages is available, please inquire with our sales associates



60W Power Supply Installation Note:

3W MR16 – Maximum 15 lamps connection per power supply

PACKAGING SPECIFICATIONS



LIMITED WARRANTY

Manufacturer warrants to the Purchaser that each Product manufactured and sold by it will be free from defects in material and workmanship in its intended use (normal wear and tear excepted) for the period of one year from date of Purchaser's purchase (the invoice date) from Manufacturer. Manufacturer's warranty flows only to Purchaser. If any Product covered by this warranty is returned by Purchaser in accordance with Manufacturer's Products Return Policy, including without limitation its return authorization provisions, within the applicable warranty period set forth above, and upon examination Manufacturer determines to its satisfaction that such Product was defective in material or workmanship at the time of delivery to the Purchaser, Manufacturer will, at its option, repair or replace the Product or the defective part thereof, or reimburse Purchaser for the purchase price. For purposes of clarity, "repair or replace the Product or the defective part thereof" does not include any reinstallation costs or expenses. If Manufacturer chooses to replace the Product and is not able to do so because it has been discontinued or is not available, Manufacturer may replace it with a comparable product. The Products Return Policy is posted on Manufacturer's Internet web site at http://www.brilliance-led.com/En_terms_conditions.asp. The foregoing notwithstanding, Manufacturer will not be responsible for damage to any Product resulting from misuse, negligence, acts of God or accident or resulting from repairs or alterations made by any person or firm not duly authorized by Manufacturer in writing. Purchaser shall convey with each Product distributed to end users the MANUFACTURER'S LIMITED WARRANTY included by Manufacturer with such Product, and, if Manufacturer determines that the appropriate remedy for a defective product is refund of Purchaser's purchase price, Purchaser shall refund to the end user (or arrange for the refund to the end user of) the full purchase price paid by the end user for such defective Product.

THIRD PARTY WARRANTIES

With respect to products sold to the Purchaser by Manufacturer but not manufactured by Manufacturer, MANUFACTURER MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, but will make available to the Purchaser, to the extent permitted by law and relevant contracts, the warranties of the manufacturer of the relevant product upon the Purchaser's timely written request.

NON-IMPLIED WARRANTIES

THE WARRANTIES GIVEN IN THESE TERMS ARE THE ONLY WARRANTIES GIVEN BY THE MANUFACTURER WITH RESPECT TO THE PRODUCTS AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, OF NON INFRINGEMENT AND OF FITNESS FOR A PARTICULAR PURPOSE. PURCHASER'S EXCLUSIVE REMEDIES, AND MANUFACTURER'S SOLE LIABILITY, FOR ANY NONCONFORMITY OR DEFECT IN ANY PRODUCT SHALL BE THOSE EXPRESSED HEREIN.

LIMITATION OF LIABILITY

An essential purpose of the limited exclusive liabilities and remedies in this Agreement is allocation of risks between Manufacturer and Purchaser, which allocation of risks is reflected in the purchase price for the Products. UNDER NO CIRCUMSTANCES SHALL MANUFACTURER'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR MANUFACTURER'S PERFORMANCE OR ASSERTED FAILURE TO PERFORM HEREUNDER, IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EXCEED THE PURCHASE PRICE OF THE PRODUCT TO WHICH SUCH LIABILITY RELATES. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES RESULTING FROM LOSS OF USE, PROFITS, BUSINESS OR GOODWILL, WHETHER OR NOT MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY THEREOF.