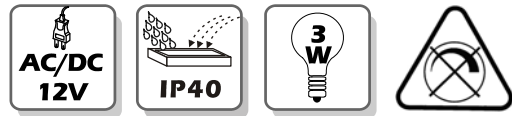


Features

- Light source: 3X1W Cree XPE power LED
- Source life: More than 40,000 hours
- Low heat, less than 58°C for 3W
- no UV or IR light radiation
- Homogeneous illumination
- Sleek designed thermal plastic heat fins with excellent thermal efficiency, **light weight.**
Only 27 gram
- 3W MR16 can achieve directional light output equal to 30W halogen lamp yet consume 80% less power
- Reverse polarity protection
- Approbation: **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	3X1W Cree XPE power LED
OPTICS	3 in 1 optical grade PC lens
LENS DIAMETER	35mm
BEAM ANGLE	30° (Wide Spot)
RENDERING INDEX (Ra)	>80 (for warm white color)
TOTAL LENGTH	50±1.5 mm (including pins)
WEIGHT	27.5 g
HOUSING MATERIAL	Thermal plastic, 5 cm (2") diameter
BASE	GX5.3 pins
DIMMERBILITY	Not Dimmable

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	≤ 4W
POWER FACTOR	≥ 0.9
TRANSFORMER	Low voltage magnetic to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)

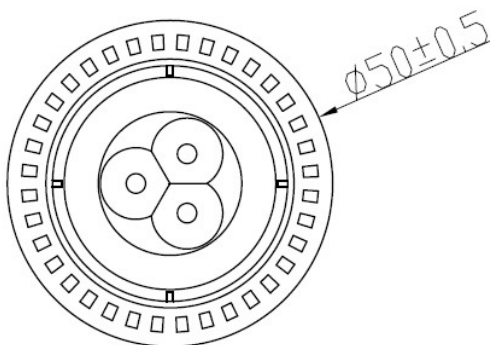


Fig 1. MR16 top view

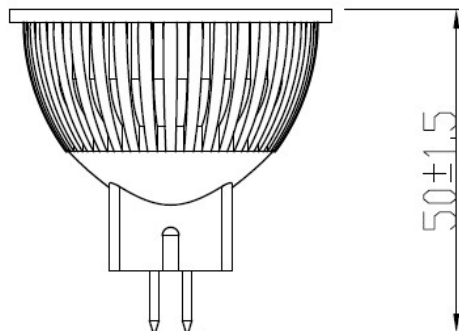
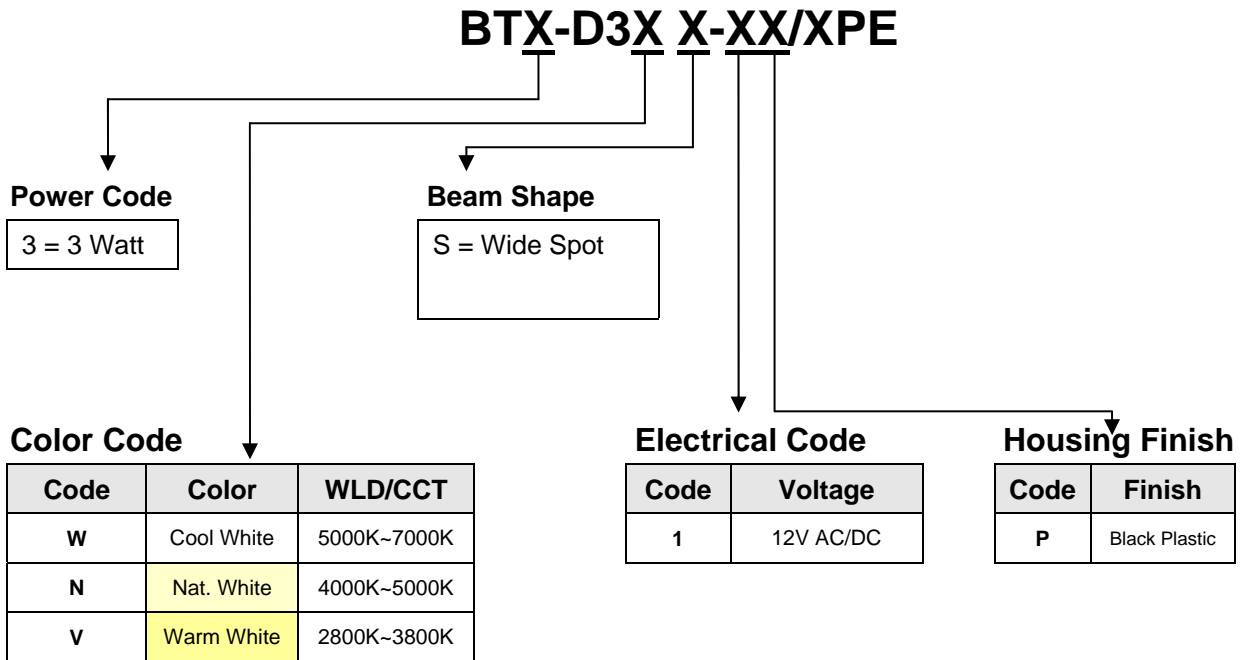


Fig 2. MR16 side view

PRODUCT ORDERING CODE



3W MR16 PRODUCT CODE

ORDER CODE	Color	CCT (K)	Operating Voltage	LED Power (W)	Typ. Luminous Flux (lm)	Typ. Center Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-D3WS-1P/XPE	Cool White	5000K~7000K	12V AC/DC	3X1W	190 lm	900	30° ±2°
BT3-D3NS-1P/XPE	Nat. White	4000K~5000K			175 lm	850	
BT3-D3VS-1P/XPE	Warm White	2800K~3800K			150 lm	800	

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

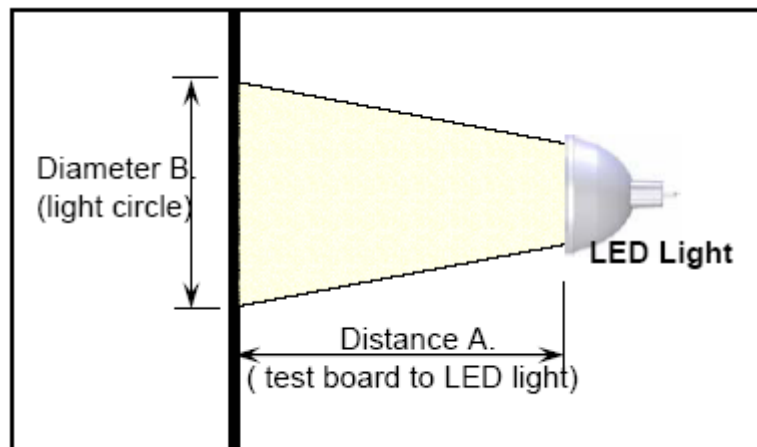


Fig 1. Set up for Illuminance Measurement

3X1W Model

Distance		Typical Illuminance Measured at Center of Beam		
Dist A (cm)	Dia. B (cm)	Cool White	Nat. White	Warm White
30	70	6900	6850	6800
50	110	3000	2950	2900
100	170	900	850	800
150	250	480	430	380
200	320	320	270	220

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

Typical Electrical Characteristics at T_a=25°C
3X1W 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	—	300	—	mA
Estimated Life ^[1]		—	40,000	—	hours
Optimized Body Temp (3X1W LED)	T	—	55	60	°C

Note[*] – Manufacturer projects spotlights made with Cree XPE LED to maintain an average of 70% lumens maintenance after 40,000 hours. This estimation is made based on data from LED manufacturer

Note: Lamp is optimized for 12V DC input voltage

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

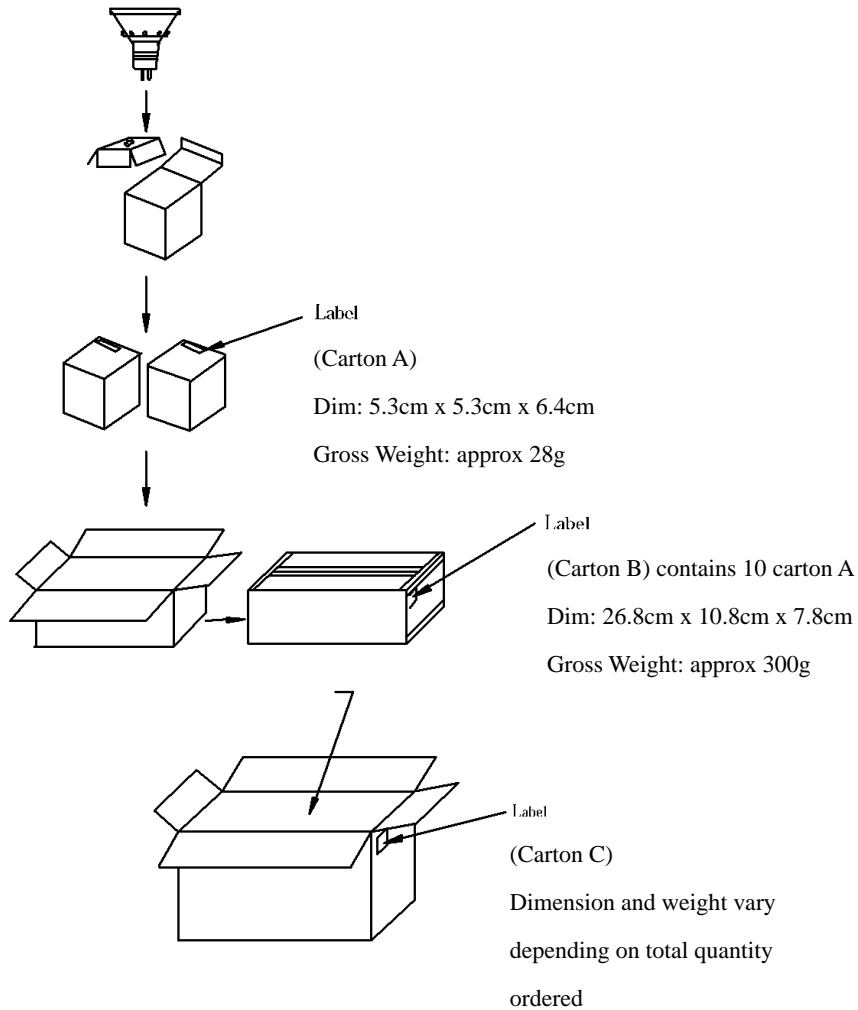
Remarks: Other wattages is available, please inquire with our sales associates



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 two years from manufactured date. 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.

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MR16D3-XPE-Rev. 1.0a
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