

LED Lamp

6W MR16



6W MR16 uses high brightness LED engine which gives a superb illuminance.

It is ideal for the use in tracks, rails, and pendants in exhibit, architectural and residential applications. Furthermore, the multi-selection on various colors offers a great experience in decorative and mood lighting applications.

The lamp features standard GU5.3, which offers an instant replacement in MR16 type fixtures. With a life of more than 25,000 hours, it can be used in hard-to-reach locations to prevent a regular maintenance needs.

- Solid State Lighting Technology
- Reduce CO₂ Emission
- Superior Quality Light
- Energy Saving(6W)
- Ecologically Friendly

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Dimensions

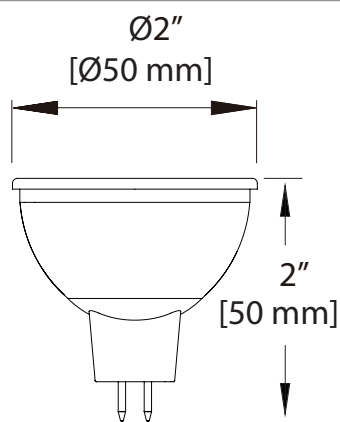


Figure 1: Dimensions for 6W MR16.

Tolerance: ± 1/8" [2.5 mm]

Absolute Maximum Rating

The following table shows electrical characteristics and operating temperature of 6W MR16.

Parameter	Symbol	Rating	Units
Plastic Housing Temperature	T_c	65	°C
Operating Temperature	T_{opr}	-20 ~ +40	°C
Storage Temperature	T_{stg}	-40 ~ +60	°C
AC / DC Input Voltage	V	12	V
Equilibrium Temperature	T_{eq}	60	°C

Table 1: Absolute maximum rating for 6W MR16.

Specifications

The following describes the choices of color temperature, angles, and CRI of 6W MR16 for different demand.

Parameter	Rating	Units
Power Consumption	6	Wattage
Angles	Beam angle 25 (Field Angles 55) Beam angle 38 (Field Angles 70)	Degree
Color Temperature	3000 / 4000 / 6000	K
CRI	80 / 75 / 70	--
Weight	45 ± 5	g
Base	GU5.3	--

Table 2: Specifications for 6W MR16.

Illuminance and Angles

• Cool White / Neutral White / Warm White

Power Consumption	Part Number	CCT(Typ.)	Color	Angles	Lux@ 1m (Typ.)	Lm(Typ.)
6W	LB-MR16-06510x	5650~7000K	Cool White		1200	360
	LB-MR16-06520x	3800~4500K	Neutral White	*Beam angle = 25° (Field Angle = 55°)	1150	330
	LB-MR16-06530x	2670~3050K	Warm White		1100	300
	LB-MR16-06710x	5650~7000K	Cool White	Beam angle = 38° (Field Angle = 70°)	900	360
	LB-MR16-06720x	3800~4500K	Neutral White		850	330
	LB-MR16-06730x	2670~3050K	Warm White		800	300

Table 3: 6W MR16 Illuminance for different colors.

Notes:

1. Lux value is measured under thermal balanced condition. (i.e. after 1 hour continuous operation)
2. LED is a dynamic and constantly evolving technology. The final lux output of your 6W MR16 may vary.
3. Input voltage = AC / DC 12V
4. * The beam angle is compatible with Philips LED MR16

Nomenclature

The following table describes the available colors, and angles.

LB - MR16 - 06 5 1 0A
 X1 X2 X3 X4 X5 X6

X1	X2	X3
SSL Series	Product name	Wattage
Ledion Bulb	MR16	06 = 6W

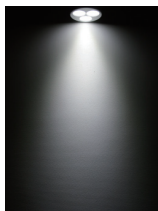
X4	X5	X6
Field Angle	Color	Cover
5 = 55° 7 = 70°	1 = Cool White 2 = Neutral White 3 = Warm White	0A = White

Figure 2: Nomenclature for 6W MR16 .

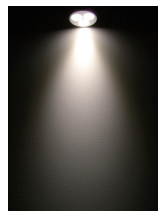
Light Patterns

The diagrams present the light patterns with respect to different color temperature and field angle.

Beam angle 25°
Cool White



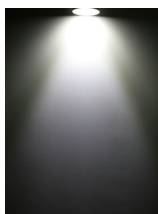
Beam angle 25°
Neutral White



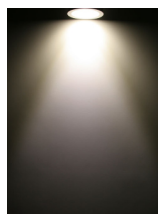
Beam angle 25°
Warm White



Beam angle 38°
Cool White



Beam angle 38°
Neutral White



Beam angle 38°
Warm White

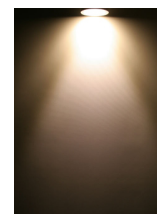


Figure 3: Light patterns for 6W MR16.

Lifetime

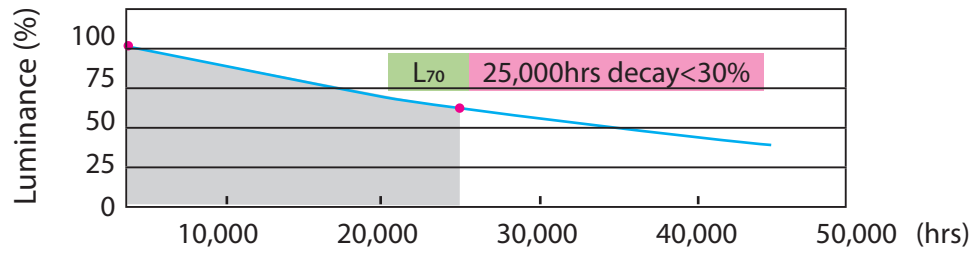


Table 4: Lifetime for 6W MR16.

Ledionopto

A New Experience in Light

Application Notes

Ledionopto 6W MR16 is compatible for traditional MR16 and more effective. Meanwhile it can be easily installed in lighting fixture.

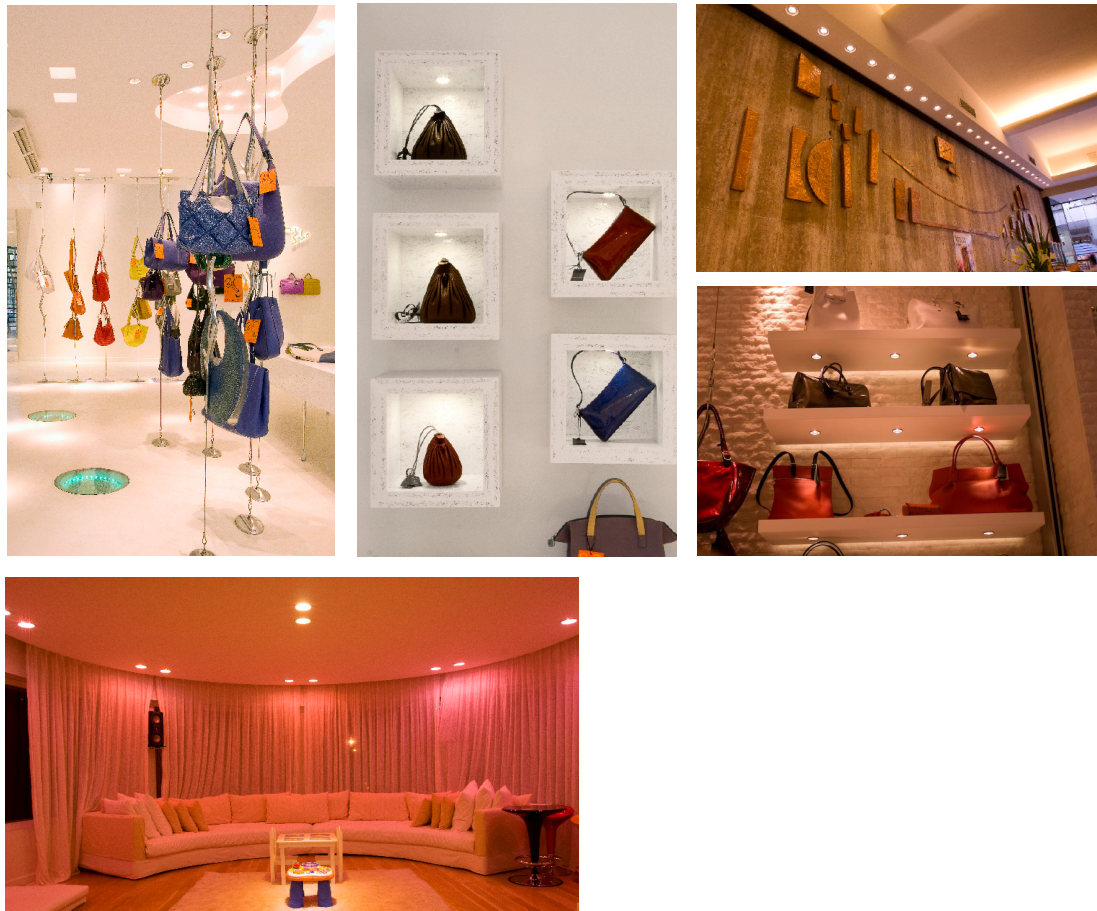


Figure 4: Application picture for 6W MR16.

Driving Transformer Selection Guideline

- AC12V Magnetic Transformer (Recommendation):

All the LED bulb is compatible with magnetic transformers used with low voltage 12V halogens, suggested transformer rated power must large than 9W with one MR16

- AC12V Electronic Transformer (Not Recommendation):


The LED bulb is not compatible with all electronic transformers. Due to the transformer minimum load issue and unstable output which could cause no light output, flickering, strobe and randomly shutdown.

- DC12V Power Supply (Recommendation):

All the LED bulb is compatible with DC12V constant voltage power supply, suggested power supply rated power must large than 9W with one MR16.

Recommended DC Power Supply

The following table describes recommend DC power supply for 6W MR16.

Input Voltage	Model	Picture
DC 12V (Input AC230V)	ANN A5-231215D	

P.S. : The DC power supply recommended connect with 1~2pcs 6W MR16.

Table 5 : 6W MR16 recommend DC power supply transformer.

Environmentally Friendly

With the increasing demand for energy and the effect on global warming, Ledionopto lighting plays a role in preserving the forest by reducing energy consumption, and CO₂ emission one step at a time.

Replacing traditional halogen lamp with Ledion Lighting 6W MR16 Spotlight, one can help in reducing global warming by 245.9 kg of CO₂ annually.

6W MR16 VS 50W Halogen

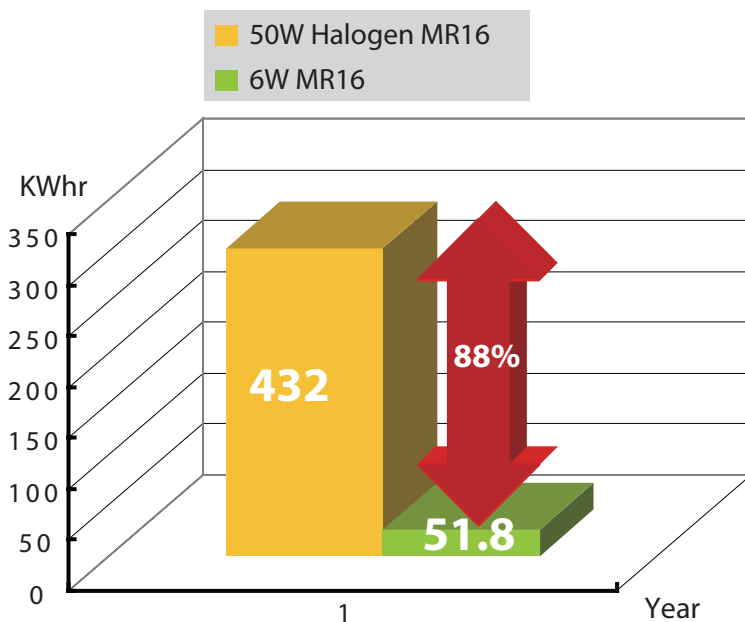
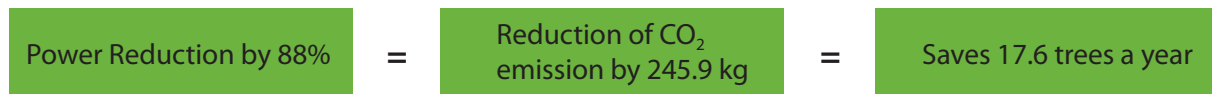


Figure 5 : 6W MR16 Environmentally Friendly.

Note : 1. Calculation based on 24 hours of daily operation.

Economical



Power Consumption: 50W
Expected Lifetime: 2,000 hrs



Power Consumption: 6W MR16 Saving : 380.2 kWh/year
Expected Lifetime: 30,000 hrs

Accumulated cost over lifetime

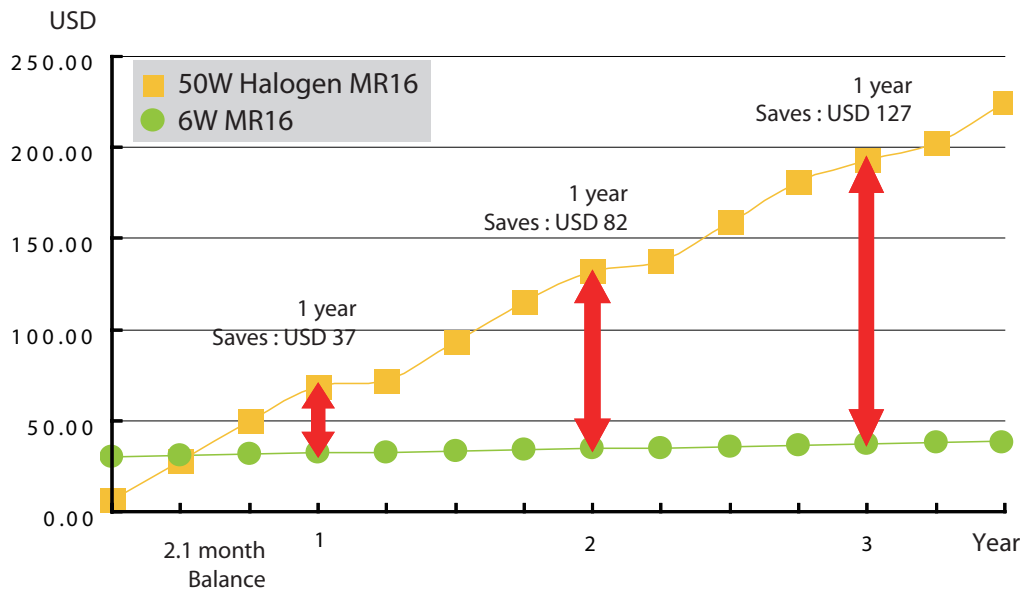


Figure 6 : 6W MR16 VS 50W Halogen.

Notes : 1. Calculation based on 24 hours of daily operation (€9.41/kWh).
 2. Cost includes the replacement of 50W halogen MR16.

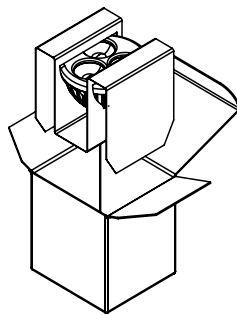
Package Information(Standard)

Notes:

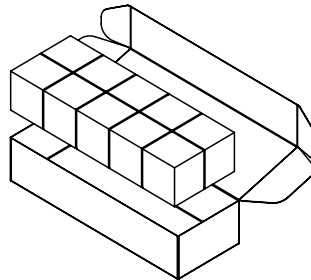
Pack Dimensions : 60mm(length)*55mm(width)*65mm(height)

Box Dimensions : 330mm(length)*120mm(width)*70mm(height)

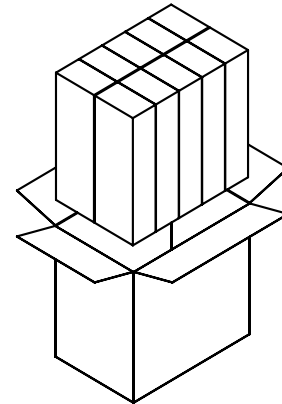
Carton Dimensions : 368mm(length)*248mm(width)*350mm(height)



1pc / Pack



10 pcs / Box



100 pcs / Carton

Figure 7: Standard Package informations for 6W MR16.

List of the Modifications

Versions	Modification	Date
0	Establish a datasheet.	2011.03.24
0.1	1. Change the company logo to Ledionopto 2. Modify the part number, flux and lux.	2011.05.09
1	Establish a official datasheet.	2011.06.28

Table 7 : list of the modifications for 6W MR16.