## **Ledi@**nopto

# 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 CO<sub>2</sub> Emission
- Superior Quality Light
- Energy Saving(6W)
- Ecologically Friendly



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### **Technical Specifications**

Parameter	Rating	Units
Power Consumption	6	Wattage
Color Temperature	3000/4000/6000	K
Power Input	AC/DC12V	
CRI	80 / 75 / 70	
Weight	$40 \pm 5$	g
Operating Temperature	-20 ~ +40	°C
Storage Temperature	-40 ~ +60	°C
Equilibrium Temperature	60	°C
Base	GU5.3	
Colour Consistency	6 steps of MacAdam ellipse	
Lamp Power Factor	By Used Driver	
Quick light / Instant light	<1s Instant full light	
Dimmable	Option by driver	
Switching cycles	>100,000 times	

Table 1: Technical Specifications for 6W MR16 Series.

#### Notes

- 1. Power consupton has 10% tolerance.
- $2. The operating \ \dot{t} emperature \ is \ based \ on \ the \ ambient \ temperature \ to \ the \ heat \ sink \ in \ 5cm \ distance$

### **Dimensions**

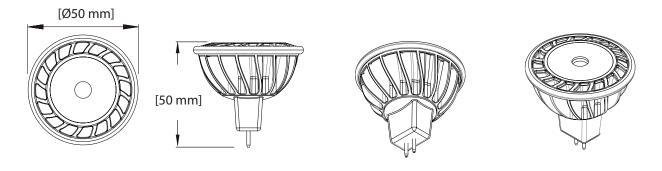


Figure 1: Dmensions for 6W MR16.



### **Illuminance and Angles**

### • Cool White / Neutral White / Warm White

Power Consumption	Part Number	Beam Angles	Field Angles	CCT(Typ.)	Lux@ 1m (Typ.)	Lm (Typ.)
6W	MR16-06510x	25°	55°	6000K	1200	390
	MR16-06520x			4000K	1200	360
	MR16-06530x			3000K	1200	330
	MR16-06710x	38°	70°	6000K	900	390
	MR16-06720x			4000K	900	360
	MR16-06730x			3000K	900	330

Table 3: 6W MR16 Illuminance for different colors.

#### Notes:

### • High Performance

Power Consumption	Part Number	Beam Angles	Field Angles	CCT(Typ.)	Lux@ 1m (Typ.)	Lm (Typ.)
6W	MR16A-06510x	25°	55°	6000K	1650	580
	MR16A-06520x			4000K	1550	500
	MR16A-06530x			3000K	1360	430
	MR16A-06710x	38°	70°	6000K	1150	580
	MR16A-06720x			4000K	1100	500
	MR16A-06730x			3000K	1050	430

<sup>1.</sup> Lux value is measured under thermal balanced condition. (i.e. after 1 hour continuous operation)

<sup>2.</sup> LED is a dynamic and constantly evolving technology. The final lux output of your 6W MR16 may vary.

<sup>3.</sup> Input voltage = AC / DC 12V

<sup>4. \*</sup> The beam angle is compatible with Philips LED MR16



### **Nomenclature**

The following table describes the available colors, and angles.

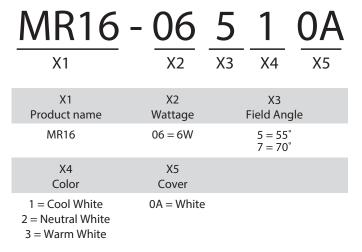


Figure 2: Nomenclature for 6W MR16.

### High Performance

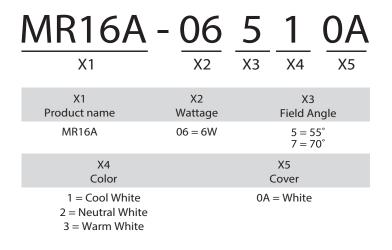


Figure 2: Nomenclature for 6W MR16A.

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### **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.

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### **Light Patterns**

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

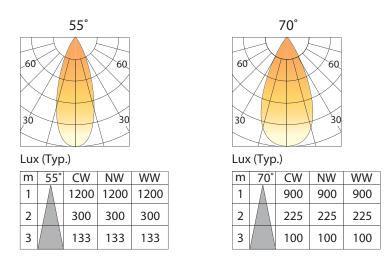


Figure 2: Nomenclature for 6W MR16.

### High Performance

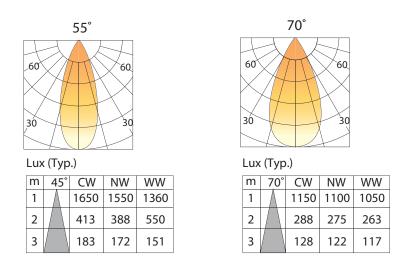


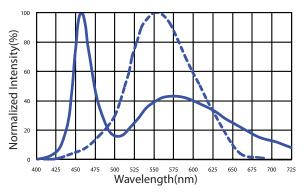
Figure 2: Nomenclature for 6W MR16A.



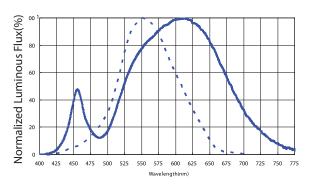


### **Spectrum Curve**

### **Spectrum**



Color sectrum for 6W MR16/6W MR16A cool White.



Color sectrum for 6W MR16 / 6W MR16A warm white and Neutral White .

### Lifetime

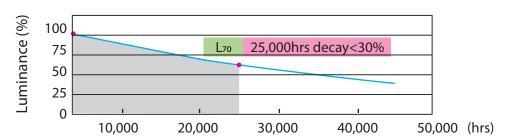


Table 4: Lifetime for 6W MR16.

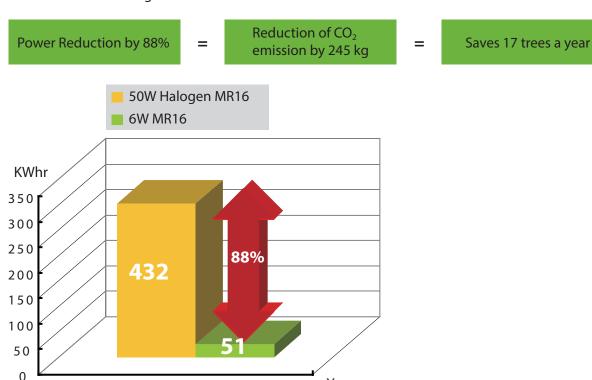


### **Environmentally Friendly**

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  $CO_2$  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 kg of CO<sub>2</sub> annually.

### 6W MR16 VS 50W Halogen



Year

Figure 5: 6W MR16 Environmentally Friendly.

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





### **Driving Transformer Selection Gulideline**

### - 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):

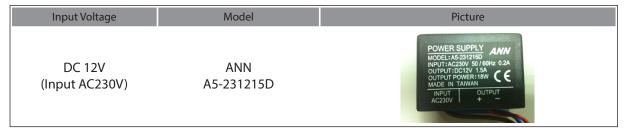
The LED bulb is not compatible with all electronic transformers. Due to the transformer minimum load issue and unstable output which could cause no light output, flickering, strobe and randomly shutdown.

### - DC12V Power Supply (Recommendation):

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

### **Recommended DC Power Supply**

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



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

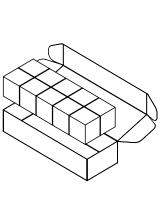
Table 5:6W MR16 recommend DC power supply transformer.

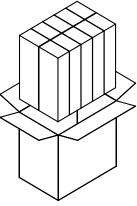


### Package Information(Standard)

#### 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)





10 pcs / Box

100 pcs / Carton