

**“Finally, the *EliteLux* upgraded *Master* series is a family of high power LED based GU10 lamp that is all right. Right looks, right design, right form factor, right performance, and right price!”**

EliteLux<sup>□</sup> **M2** series compact lamps are designed to fit into standard GU10 fixtures and sockets, and project a 15°, 35° or 60° well-defined spot light. It is well suited for tracks, rails, cables and pendants in interior architectural, retail, exhibit, display and residential applications.

The lamp features standard GU10 bi-pin connectors and sleek aluminum housing with frosted silver finish. The EliteLux<sup>□</sup> **M2** series is available in 1W, and 3W power rating. They are also available in two distinct white Kelvin temperatures: 3500K and 6000K. Other colors are also available.

The **M2** series utilizes the Technologies' innovative heat management technology specifically developed for the high power (up to 3W power LED) solid state lighting devices. It uniquely allows heat to dissipate properly; making the product thermally stable for long hours of operation and last much longer than conventional halogen GU10.

EliteLux<sup>□</sup> **M2** series GU10 is equipped with optical grade polycarbonate lens that allows highest light transmission at 15°, 35° and 60° beam angle.



## Features

- ☒ Light source: One piece 1W or 3W LED
- ☒ Source life: More than 40,000 hours
- ☒ Low heat, no UV or IR light radiation
- ☒ Full range of colors
- ☒ Homogeneous and well defined illumination
- ☒ Optimized heat sink with the right looks and sleek design
- ☒ 3W version can achieve directional light output equal to 15W halogen lamp yet consume 80% less power
- ☒ Safety Standard: **CE** and **RoHS**
- ☒ 1 year limited warranty (see page 7)
- ☒ Works with worldwide electrical systems (100~240V AC)

## Typical Applications

- ☒ Landscape Accent/Spot lighting
- ☒ Architectural Lighting
- ☒ Display Case Accent/ Art work Lighting
- ☒ Mood Lighting
- ☒ Amusement Park Accent



## PRODUCT SPECIFICATIONS

<b>LIGHT SOURCE</b>	1X1W or 1X3W power LED
<b>OPTICS</b>	Optical grade PC collimator
<b>LENS DIAMETER</b>	33 mm
<b>BEAM ANGLE</b>	15°(Narrow Spot), 35° (Wide Spot), or 60° (Flood)
<b>MIN BEAM DISTANCE</b>	15 cm (6 inches)
<b>RENDERING INDEX (Ra)</b>	> 70 (for cool white color)
<b>TOTAL LENGTH</b>	59 mm (including pins)
<b>WEIGHT</b>	50g (1W) / 50g (3W)
<b>HOUSING</b>	Machined pure aluminum with anodized silver finish, 50 mm (2") diameter
<b>BASE</b>	GU10 pins
<b>DIMMABILITY</b>	Not Dimmable

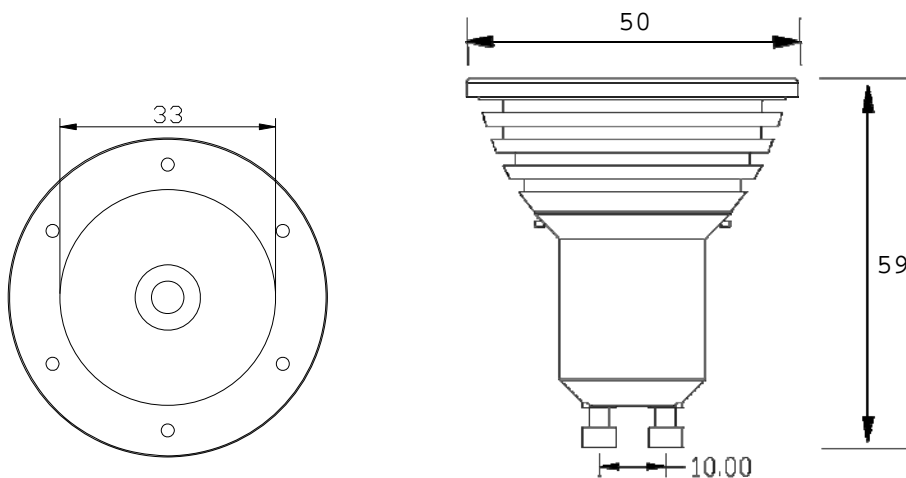
## ENVIRONMENTAL SPECIFICATIONS

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

## ELECTRICAL SPECIFICATIONS

<b>VOLTAGE REQUIREMENT</b>	110/220 V AC
<b>POWER CONSUMPTION</b>	≤ 2W (for 1W model); ≤ 3.5W (for 3W model)
<b>POWER FACTOR</b>	≥ 0.6

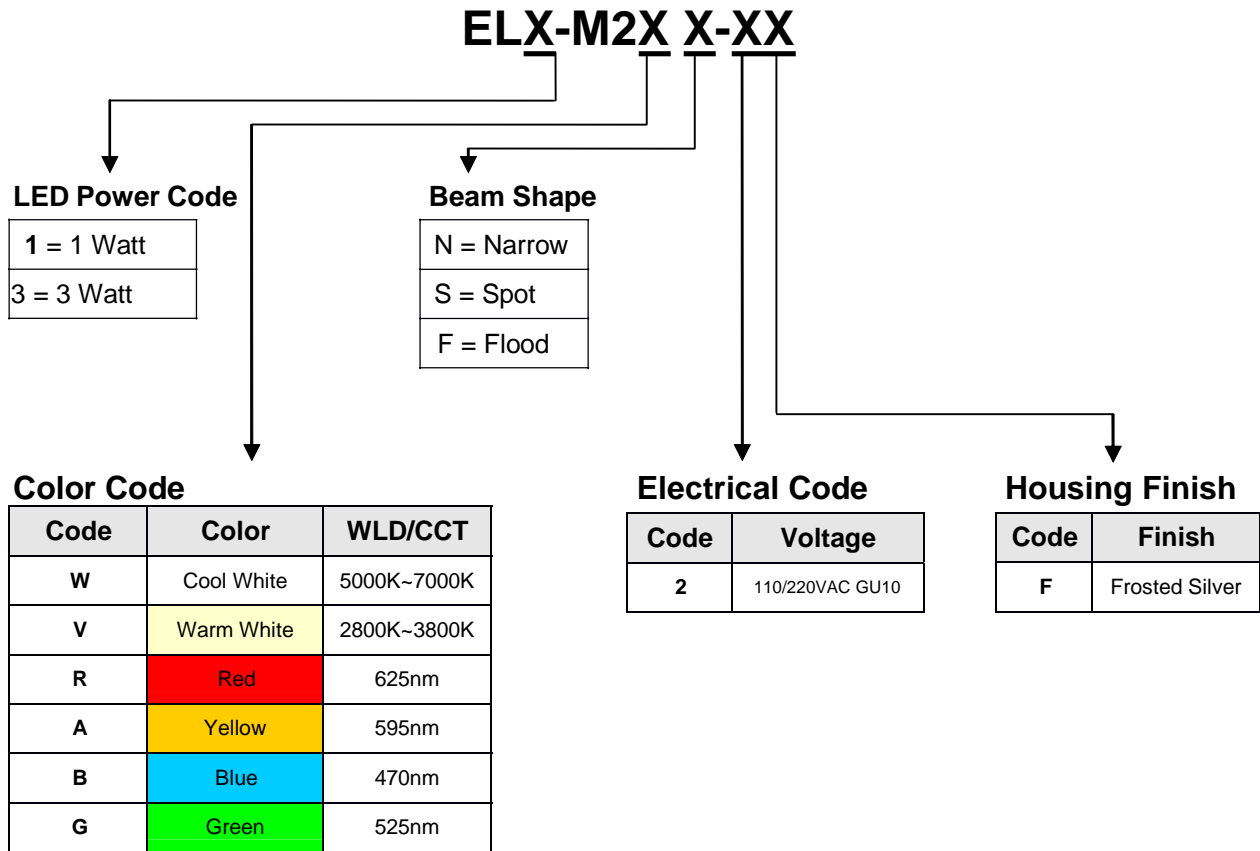
## PRODUCT DIMENSIONS (mm)



Front View

Side View

## PRODUCT ORDERING CODE



### Narrow Spot Model (15° Beam Angle)

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
EL1-M2WN-2F	Cool White	5000K~7000K	110/220V AC	1X1W	40 lm	440	15° ±2°
EL1-M2VN-2F	Warm White	2800K~3800K			30 lm		
EL1-M2RN-2F	Red	625 nm			40 lm		
EL1-M2AN-2F	Yellow	595 nm			40 lm		
EL1-M2BN-2F	Blue	470 nm			15 lm		
EL1-M2GN-2F	Green	530 nm			40 lm		
EL3-M2WN-2F	Cool White	5000K~7000K	110/220V AC	1X3W	75 lm	1000	15° ±2°
EL3-M2VN-2F	Warm White	2800K~3800K			45 lm		
EL3-M2RN-2F	Red	625 nm			55 lm		
EL3-M2AN-2F	Yellow	595 nm			60 lm		
EL3-M2BN-2F	Blue	470 nm			25 lm		
EL3-M2GN-2F	Green	530 nm			55 lm		

### Wide Spot Model (35° Beam Angle)

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
EL1-M2WS-2F	Cool White	5000K~7000K	110/220V AC	1X1W	40 lm	260	35° ±2°
EL1-M2VS-2F	Warm White	2800K~3800K			30 lm	150	
EL1-M2RS-2F	Red	625 nm			40 lm	400	
EL1-M2AS-2F	Yellow	595 nm			40 lm	400	
EL1-M2BS-2F	Blue	470 nm			15 lm	100	
EL1-M2GS-2F	Green	530 nm			40 lm	300	
EL3-M2WS-2F	Cool White	5000K~7000K	110/220V AC	1X3W	75 lm	400	35° ±2°
EL3-M2VS-2F	Warm White	2800K~3800K			45 lm	260	
EL3-M2RS-2F	Red	625 nm			55 lm	600	
EL3-M2AS-2F	Yellow	595 nm			60 lm	600	
EL3-M2BS-2F	Blue	470 nm			25 lm	180	
EL3-M2GS-2F	Green	530 nm			55 lm	400	

### Flood Model (60° Beam Angle)

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
EL1-M2WF-2F	Cool White	5000K~7000K	110/220V AC	1X1W	30 lm		60° ±2°
EL1-M2VF-2F	Warm White	2800K~3800K			25 lm		
EL1-M2RF-2F	Red	625 nm			36 lm		
EL1-M2AF-2F	Yellow	595 nm			35 lm		
EL1-M2BF-2F	Blue	470 nm			8 lm		
EL1-M2GF-2F	Green	530 nm			35 lm		
EL3-M2WF-2F	Cool White	5000K~7000K	110/220V AC	1X3W	75 lm		60° ±2°
EL3-M2VF-2F	Warm White	2800K~3800K			40 lm		
EL3-M2RF-2F	Red	625 nm			55 lm		
EL3-M2AF-2F	Yellow	595 nm			55 lm		
EL3-M2BF-2F	Blue	470 nm			15 lm		
EL3-M2GF-2F	Green	530 nm			55 lm		

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

### 1W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (110V AC)	$V_{AC}$	100	—	120	V
Input Voltage (220V AC)	$V_{AC}$	200	—	240	V
LED Forward Current	$I_F$	—	300	—	mA
Estimated Life <sup>[6]</sup>		—	40,000	—	hours
Optimized Body Temperature (1W LED)	T	—	40	45	$^\circ\text{C}$

### 3W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (110V AC)	$V_{AC}$	100	—	120	V
Input Voltage (220V AC)	$V_{AC}$	200	—	240	V
LED Forward Current	$I_F$	—	550	—	mA
Estimated Life <sup>[6]</sup>		—	40,000	—	hours
Optimized Body Temperature (3W LED)	T	—	45	55	$^\circ\text{C}$

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

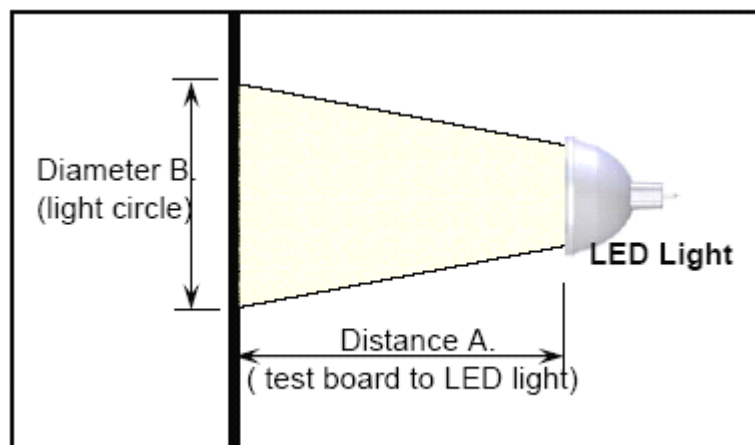


Fig. 1. Set up for illuminance Measurement

### 1W Narrow Spot Model (15° Beam Angle)

Distance		1W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	8		4900				
50	16		1900				
100	40		440				
150	70		160				
200	90		90				

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

### 1W Wide Spot Model (35° Beam Angle)

Distance		1W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	25	2300	1800	2500	800	4500	4500
50	40	1000	650	1150	300	1700	1700
100	90	260	150	300	100	400	400
150	140	130	100	150	80	200	200
200	190	90	70	100	50	150	150

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

### 1W Flood Model (60° Beam Angle)

Distance		1W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30							
50							
100							
150							
200							

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

### 3W Narrow Spot Model (15° Beam Angle)

Distance		3W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	8	8900					
50	16	3500					
<b>100</b>	<b>40</b>	<b>1000</b>					
150	70	430					
200	90	240					

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

### 3W Wide Spot Model (35° Beam Angle)

Distance		3W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	25	3500	2600	5000	2000	6000	6000
50	40	1400	1000	2050	820	2500	2500
<b>100</b>	<b>90</b>	<b>360</b>	<b>260</b>	<b>500</b>	<b>200</b>	<b>650</b>	<b>650</b>
150	140	170	120	250	100	350	350
200	190	110	80	180	90	200	200

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

### 3W Flood Model (60° Beam Angle)

Distance		3W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30							
50							
<b>100</b>							
150							
200							

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

Note: All LED GU10 lamps are burnt in for 72 hours before every order shipment.

## Optional Accessories

### 1) GU10 Connector – Part No.: 23201

Approval: VDE, UL

Rating: 125V 100W/250V

4A Material: Porcelain



## PACKAGING SPECIFICATIONS

