

# MV-LED

## Underwater LED Spotlight



**Operates off of 120 Volt AC  
or 24 Volt DC Power**

**Light output exceeds that of a  
250 Watt halogen spotlight**

**Fully dimmable,  
either via voltage or RS-485**

**Extremely resistant to shock & vibration**



*The future of underwater lighting is closer,  
brighter, and more economical than ever*

The AC or DC powered MV-LED compact underwater spotlight is a true "halogen replacement." It packs a punch - exceeding that of a 250 Watt incandescent lamp, but drawing a fraction of that power. With the MV-LED's multi-year lifespan, you will never have to replace bulbs again.

The MV-LED is a mechanically, thermally, and electrically robust lamp to be trusted for the life of your vehicle or sled. The MV-LED works with all video formats. Three versions are available: 120 VAC with voltage or phase control dimming, 24 VDC with analog control voltage dimming, or 24 VDC with RS-485 dimming that can be connected to any serial bus or computer. A variety of connector, wiring, and mounting options make the MV-LED an easy "drop-in" replacement for its halogen predecessors.

The MV-LED's highly-focused, intense light beam will bring life into your scene, and works great with high definition video. Using the included collar and yoke bracket, it is easy to direct the lamp towards your target.

Don't be disappointed by LED lamps offered by competitors - make the smart choice and invest in certified ROS MV-LEDs.

*ROS has been manufacturing an array of harsh environment cameras, lights, positioners, and specialized systems designed for oceanographic nuclear, industrial, and military applications for over 34 years.*

# MV-LED - Underwater LED Spotlight

## PERFORMANCE

Lamp Type: Ultra High-intensity White LED Array  
 Light Color Temperature: 6,300° K (typical)  
 Color Rendering Index: 70 (typical halogen light - 40; typical fluorescent light - 56)  
 Thermal Protection: Auto-resetting<sup>(1)</sup>  
 Beam Angle: 38° conical (half-angle, half-intensity)

Dimming - light is dimmed via: AC Input voltage or AC phase control | DC Analog control(0-5V) (0-10V) | RS 485 RS 485 control  
 Light Output: 2000 lux at 1m in-air<sup>(2)</sup> | 5000 lux at 1m in air<sup>(2)</sup> | 5000 lux at 1m in-air<sup>(2)</sup>

## ELECTRICAL

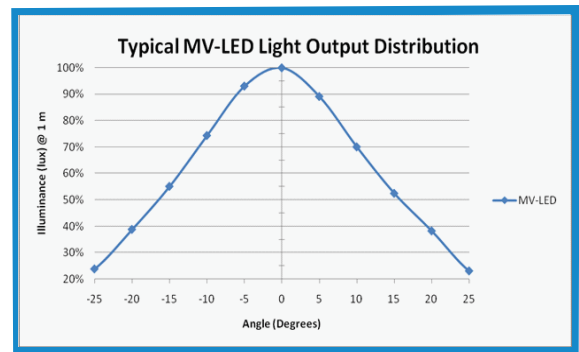
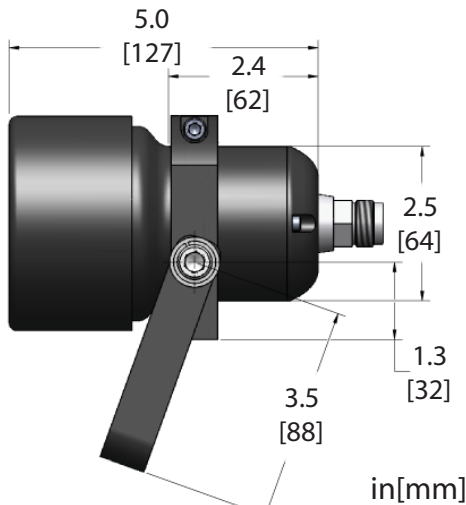
Operating Voltage: 1-120VAC 50/60 Hz | 24-30 VDC | 24-30 VDC  
 Operating Current: 540 mA typical @ 120VAC | 1.82 A Typical @ 24 VDC | 1.82 A Typical @ 24 VDC  
 Power Consumption: 65 Watts maximum at full intensity | 45 Watts maximum | 45 Watts maximum

## MECHANICAL

Housing Material: Anodized 6061-T6 Aluminum  
 Housing Finish: Hard black anodized, corrosion-barrier  
 Size (w/o connector, bracket): 88mm (3.5in) diameter front end x 64mm (2.5in) diameter body x 127mm (5.0in) length  
 Mounting: Two 1/4-20 base holes in collar bracket, two 1/4-20 opposing holes in collar bracket, three holes in yoke bracket

## ENVIRONMENTAL

Weight in Air: 1.06 kg (2.35 lbs)  
 Weight in Water: .63 kg (1.39 lbs)  
 Operating Depth: 4,000 m (13,000 ft)  
 Operating Temperature: Operates in water temperatures of -2°C to 30°C (28°F to 86°F)



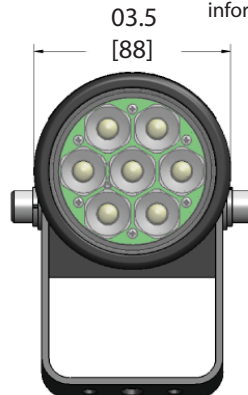
## NOTES

(1) The MV-LED is electronically protected from overheating via a thermal cut-off switch. The light will run for approximately 15 minutes in air (at an ambient temperature of 20°C (68°F)) before automatically powering down or blinking. There is no reset; the light will automatically re-illuminate once it cools to a safe operating temperature. The thermal protection is intended as a failsafe feature from unintentional damage due to extended use in air. It is not recommended intentionally to run the light out of water for any extended period as it will reduce the product lifespan.

(2) Don't be fooled by manufacturers who use "lumen" to rate their low-cost LED lamps! The true measure of usable light intensity is measured in "LUX." Ask your ROS account manager for more information today.

- CONNECTOR
- 120 VAC: 10-00500
  - 24 VDC: 10-00565
  - 24 VDC(485): 10-00550
- Blank - No Yoke Bracket  
 Y- Yoke Bracket Included
- 01 1 PIN, 2 CKT
  - 02 IESQ4M-BC1-1/2"
  - 03 5507 - 1503
  - 04 XSG-3-BCL-HP
  - 05 LPBH - 3-MP-1/2"
  - 06 BH-3-MP
  - 07 MSAJ-3-BCR
  - 11 CRE / SEACON MSAJ-3-BCR
  - 12 MCBH-4-MP-1/2"
  - 13 3-PIN, RMG-3-BCL-SS
  - 14 4 CKT
  - 15 BH-4-MP
  - CS CUSTOMER SPECIFIED

Note: 4 Pins needed for RS485



Certificate Number: 160263  
 BS EN ISO 9001 : 2000

## Sea and Land Technologies Pte Ltd

65 Tuas Avenue 1  
 Singapore 639508  
 Email: enquiry@sea-landtech.com.sg  
 Website: http://www.sea-landtech.com.sg

Tel : +(65) 6518 0777  
 Fax : +(65) 6563 0366

Specifications subject to change without notice.