

Q-LED III

Underwater LED Floodlight



**Compatible with 50 or 60 Hz power
and NTSC or PAL video format**

**Available for standard 120 or 220 volt
AC power operation**

**Light output equivalent to a 500 watt
halogen floodlight**

Extremely resistant to shock & vibration



Bright, Sturdy & Ultra-efficient

The Q-LED III underwater floodlight is powered by AC voltage. That means that the traditional halogen lights on your vehicle or other application can be “plug and play” replaced with Q-LED III’s. It has an identical mounting pattern to the QL-3000 and Q-LED lights, the ROS industry standards that have illuminated the depths of the ocean for over three decades. The ultra-efficient Q-LED III’s light output exceeds that of a 500 watt halogen light, yet it draws significantly less power.

The Q-LED III takes LED technology to the next level. The brightest ROS LED light, the intensity is impressive, allowing further and wider search effort visibility. Seeing is believing.

Regardless of duty cycle, the first recommended maintenance for the hassle-free Q-LED III is at the 5-year mark, when it is recommended that its three O-rings be replaced. After that, the light can go right back underwater.

The Q-LED III is certified submersible to 4,000 meters, and operates off of 120 or 220 volt AC power, as well as 160 or 320 VDC respectively. It has built-in thermal protection that depowers the light before accidental use in air causes any damage; the light will automatically re-power once the temperature has returned to a normal level.

The innovative Q-LED III is the light that is bringing solid state lighting technology into the mainstream ROV world. Don’t get left in the dark – replace all your old halogen lights with Q-LED IIIs today.

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 35 years.

Q-LED III - Underwater LED Floodlight

PERFORMANCE

Lamp Type:	Ultra High-intensity White LED Array
Light Color Temperature:	5,600° K (typical)
Dimming:	Light is dimmed via input voltage and can also be dimmed via AC phase control ⁽¹⁾ if powered using AC power or PWM if powered using DC power
Thermal Protection:	Auto-resetting ⁽²⁾
Color Rendering Index:	70 (typical halogen light ~40; typical florescent light ~56)
Light Output:	Equivalent to a 500 Watt halogen lamp
Beam Angle:	80° x 80° flood

ELECTRICAL

Power Consumption: AC Powered: 250 VA ⁽³⁾ DC Powered: 160 W

INPUT VOLTAGE	OPERATING CURRENT	LIGHT OUTPUT	MAX OPERATING VOLTAGE
120 VAC 50/60 Hz 250 VA	2.1 A	3500 Lux	132 VAC
160 VDC	1.0 A	3500 Lux	160 VDC
220 VAC 50/60 Hz 250 VA	1.1 A	3500 Lux	242 VAC
320 VDC	0.5 A	3500 Lux	320 VDC

MECHANICAL

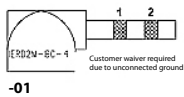
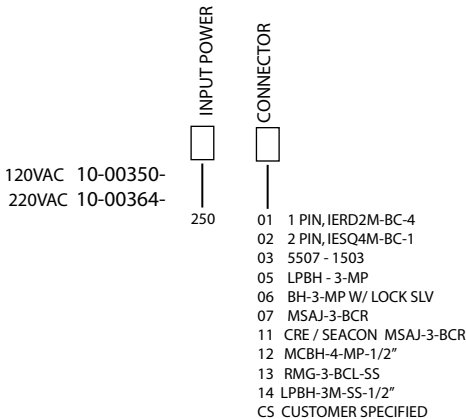
Housing Material:	Anodized 6061-T6 Aluminum
Housing Finish:	White powder coated enamel finish
Size (w/o connector):	193.4mm (H) x 63.5mm (W) x 63.5mm (D); 7.6in (H) x 2.5in (W) x 2.5in (D)

ENVIRONMENTAL

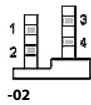
Weight in Air:	1.66 kg (3.65 lbs)
Weight in Water:	0.88 kg (1.93 lbs)
Operating Depth:	4,000m (13,000 ft) (6,000m optional)
Operating Temperature:	Operates in water temperatures of -2 to 40°C (28 to 104°F)
Mounting:	Four ¼"-20 tapped holes in base on 2.0" mounting centers

NOTES

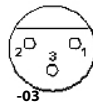
- Dimming can be achieved using AC phase control dimmers or adjusting the input voltage via a variable transformer. Phase control dimmers control the time that voltage is applied to the unit, which means the light will not react to the entire range of the dimmer like halogen lamps. The light output of 120 VAC units typically vary with input voltage from 70 VAC-120 VAC (95 VDC-160 VDC); below 70 VAC the light is off. The light output of 220 VAC units typically vary with input voltage from 140 VAC-220 VAC (200 VDC-320 VDC); below 140 VAC the light is off.
- The Q-LED III is electronically protected from overheating via a thermal cut-off switch. The light will run for approximately 5 minutes in air (at an ambient temperature of 20°C (68°F)) before automatically powering down. There is no manual 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. Running the light out of water for any extended period will reduce the product lifespan.
- Because the Q-LED III is not a purely resistive load, the electrical power ratings are VA (apparent power) rather than W.



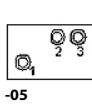
IERD2M-BC-4
ROS# 60-04010-4
1 = Load
2 = Neutral



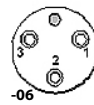
IESQ4M-BC-1
ROS# 60-04020-4
1 = Load
2 = Earth Ground
3 = Neutral
4 = Earth Ground



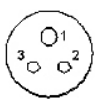
IE-55-1503-BCR/
5507-1503
ROS# 60-04016-4
1 = Load
2 = Neutral
3 = Earth Ground



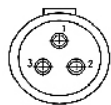
LPBH=3-MP
ROS# 60-01010-4
1 = Load
2 = Neutral
3 = Earth Ground



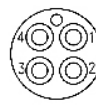
BH-3-MP W/LOCK
SLEEVE
ROS# 60-04080-4
1 = Earth Ground
2 = Load
3 = Neutral



MSAJ-3-BCR
ROS# 60-01059-4
1 = Earth Ground
2 = Load
3 = Neutral



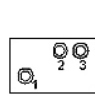
CRE/SEACON-
MSAJ-3-BCR
ROS# 60-01146-4
1 = Earth Ground
2 = Load
3 = Neutral



MCBH-4-MP=1/2"
ROS# 60-01003-4
1 = Earth Ground
2 = Load
3 = Neutral
4 = N/C



RMG-3-BCL-SS
ROS# 60-01158-4
1 = Earth Ground
2 = Load
3 = Neutral



LPBH-3M-SS
ROS# 60-01180-4
1 = Load
2 = Neutral
3 = Earth Ground



5618 Copley Drive
San Diego, CA 92111 USA
Tel (858) 565-8500
Fax (858) 565-8808
East Coast Office (804) 754-3936

www.rosys.com
sales@rosys.com