



# **STR SEALIGHT 10**



The STR SeaLight LED-10-DC is a high specification wide angle underwater LED, designed to complement a wide range of ROV mounted camera and video inspection systems.

This unit benefits from very high efficiency levels, resulting in 10000lm of illumination for only 90W of electrical power. To achieve this level of illumination previous generations of LEDs may require greater than 160W or even 500-800W for halogen based lamps. This reduced power consumption aids thermal performance resulting in improved product lifespan and ease of integration to ROV power systems.

In addition to its high efficiency, the SeaLight LED-10-DC has been designed to offer a high quality of illumination, providing a wide beam of 10000K daylight colour temperature light.

Combining a 3000m depth rated, robust hard anodised aluminium housing along with an impact resistant acrylic lens ensures that this product can excel in harsh environments.

The unit may be controlled using the STR Lamp Control software. This software allows the LED to be remotely configured, dimmed and monitored via a single RS232/485 port. When using RS485 it is possible to connect multiple LED units to form an RS485 network, reducing the RS485 port requirement on the ROV or vehicle to a single port. It is also possible to control the LED intensity from 100-0% using a 0-10V analogue dimming voltage. In the absence of this control voltage the LED will initialise at 100% illumination to allow the unit to operate without control stimulus. The SeaLight may also be integrated into 3rd party control systems Such as SAAB Seaeye via RS485 networking.

A range of mounting brackets and connector options are available to suit most applications including 3rd party ROV integration. A highly compact external AC power supply is available for applications where DC power is unavailable.

### **KEY FEATURES**

- 19-65V DC @ 90W
- 10000 lumens
- 120° Wide Beam Angle
- 3000m Depth Rating

- Compact & Durable
- High Efficiency & Long Life
- Full Control Via RS485, RS232, 0-10V DC

## **STR SEALIGHT** 10

#### **SeaLight LED-10-DC:**

**Input Supply Voltage:** 19 to 65VDC

90W @ MAX brightness **Input Power:** 

**Input Current:** 3.7A @ 24V, 1.8A @ 48V

Reverse polarity protected, over **Input Protection:** 

voltage, thermal shut down, protected signal inputs, isolated power input.

**Lumen Output:** 10000lm typical

**Luminous Efficacy:** >114lm/W typical

**Colour Temperature:** 5000K

120° to 50% **Beam Angle:** 

**Depth Rating:** 3000m operational

**Operating Temperature:** -10°C to 45°C

**Housing Material:** Hard anodised aluminium/Acrylic

**Connector:** MCBH8M/MCIL8F mating half

Weight: 2.2kg in air / 0.95kg in water

**Dimensions:** 

147mm L x 104mm Dia.

**Communications:** 0-10V. RS232 & RS485

(Networkable via RS485)

Software: Remote configuration and

monitoring via Windows application

& RS232/485.

### **SeaLight PSU:**

**Input Supply Voltage:** 80-264V AC 47-63Hz

(PFC)/113-370V DC

Power: 200W Max

48V DC **Output Voltage:** 

Self reset protection for **Input Protection:** RS242,RS485,0-10V

Over-Current @4.6A & **Output Protection:** 

Over-Temperature

**Depth Rating:** 3000m operational

**Operating Temperature:** -10°C to 50°C

**Housing Material:** Hard anodised

aluminium/Acrylic

**Connector:** MCBH16M/MCIL16F mating half

Weight: 2.4kg in air/1.0kg in water

**Dimensions:** 213mm L x 90mm Dia.

