



SeaArc2 (HID)

**HIGH EFFICIENCY METAL
HALIDE ARC LAMPS**

**COMPACT SIZE
AND WEIGHT**

**SUITABLE FOR COLOR
OR B/W VIDEO IMAGING**

400 WATT MODEL;

250W SPECIAL ORDER



The SeaArc2 HID (High Intensity Discharge) underwater arc lights are 3-5 times more efficient (lumens/watt) than comparable tungsten-halogen lights. Since there is no filament to break, SeaArc2 lights are less sensitive to vibration or shock. The SeaArc2 HID lamp utilizes several types of lamps: Thallium Iodide (TI), Thallium-Iodide/Electronic Ballast (TI/EB), Daylight (DL), and Ultraviolet (UV).

TI: TI lamps produce an intense, monochromatic green light output (535 nm) which is close to the transmission "window" of seawater. The TI lamp offers maximum light penetration for long range monochromatic imaging applications such as submersible navigation and subsea surveying.

TI/EB: Same as TI, except it operates with DeepSea's HMI electronic ballast. Using a special ignitor, this lamp gives users the flexibility to use one type of ballast to power an HMI or a TI lamp. You can freely swap lightheads with no modification to the ballast. DeepSea offers a dual ballast housing, so that users can operate a TI/EB and HMI from the same housing.

DL: Daylight lamps have a color temperature of 5000-6000K, with a higher blue and green component than quartz halogen, allowing it to penetrate further through seawater.

UV: The Ultraviolet SeaArc2 HID underwater arc light is a special UV-enhanced arc lamp designed for hydrocarbon fluorescence. Its most common application will be for detecting fluid leaks in oil tankers, barges, and offshore pipelines. Any ship (commercial or military) suspected of leaking oil would be a candidate for UV inspection. It's also suitable for magnetic particle NDT inspection. Available in 400W only for 1000m depth rating. A retrofit kit is also available for current HID customers who want to convert to UV. The specially doped UV arc lamp and filter (with light baffle holder) are all that are necessary. The UV lamp and filter combination provide a light that is ten times more intense than other UV lamps, and is more UV-enhanced than Mercury vapor lamps. The lighthead can be connected up to 1,000 feet away from the ballast.

SeaArc2 HID lights are best used in applications where: 1) long lamp life is needed (5-10 times greater than HMI lamps), 2) cost is a limiting factor (HID ballasts and lightheads are less expensive than HMI), and 3) instant restrike is not needed.

SeaArc2 HID lamps require a current-limiting, AC magnetic ballast to operate (except for the TI/EB lamp). Ballasts are available as either a pressure-compensated underwater ballasts or topside dry ballasts. The standard SeaArc2 HID has a 400W lamp; 250W lamps are available as special order. There are options available in the types of reflectors, depth rating, types of material, and types of ballasts. Specification for the 1000 meter lighthead are on the reverse side as a sample of what is available.

SeaArc2 (HID) Specifications

MECHANICAL

Length:	31.2 cm (12.30 in.)
Diameter:	16.5 cm (6.5 in)
Materials	
Lighthouse Body:	Titanium or Aluminum
Dome Retaining Cowl:	Acetal (Delrin)
Glass Dome:	Borosilicate
Air Weight:	3.54 kg (7.8 lb)
Water Weight (approx.):	1.09 kg (2.4 lb)

ENVIRONMENTAL

Depth Rating:	1, 000, 4,000, and 6,000 meter versions available
Temperature:	-5 to +40 deg C

ELECTRICAL

Input Connector:	LPBH-3-MP/ others available
Input Voltage:	From Ballast
Lamp Wattages:	250W, 400W
Lamp Types:	Daylight, Thallium Iodide, Thallium Iodide/Electronic Ballast (400W only), Ultra-Violet (400W only)
Reflector Options:	Spot, medium, or wide



Specifications subject to change without notice

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