

# HPS-1000 DROPLIGHT

## HIGH PRESSURE SODIUM LIGHT SYSTEM



**140,000 lumens light output – eight times more than traditional incandescent lamps**

**Ten times the average lifetime of incandescent lighting used under similar conditions**

**Patented design provides shock absorption and eliminates need for gaskets or seals**



*The HPS-1000 Droplight is a high performance underwater utility light developed for nuclear reactor refueling tasks.*

Featuring a 1,000 watt high pressure sodium lamp, the HPS-1000 Droplight provides eight times the light output and lasts an average of ten times longer than conventional incandescent lamps.

Intrinsic to the design of the HPS-1000 Droplight is our patented bonding process. A flexible insulating compound is used to permanently bond the 1000 watt HPS bulb to an electropolished stainless steel base, which provides shock absorption and eliminates the need for gaskets or seals.

The HPS-1000 Droplight also features a protective outer quartz envelope which surrounds the bulb's sodium arc tube, providing a thermal barrier. This allows the light to go from air into water while in operation without damage.\*\* The lamp is extremely rugged with no filaments to break and for added protection an electro-polished stainless steel screen completely encloses the entire bulb assembly.

The system includes the HPS-1000 Droplight, reflector, detachable power cable, and a regulating ballast power supply. With a diameter of just 3.5 inches, the droplight can be easily lowered through small openings and recovered without snagging problems. Also, the system is coupled to the light head by a Kellums grip attached to the cable for secure deployment, retrieval, and provides strain relief from the connector interface.

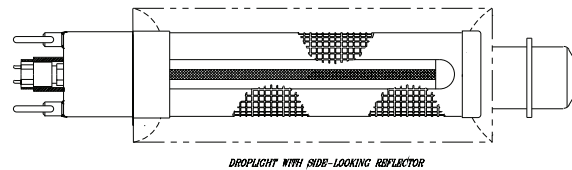
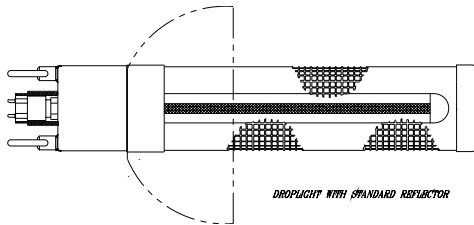
The HPS-1000 Droplight is available with two reflector options that can be easily installed or removed for different applications. The standard reflector directs the light downward. The optional side looking reflector directs the light to the side and has a weighted base to stand self supported in the flow holes of the lower core support plate. An optional cable management system includes the ballast power supply and cable reel with slip rings mounted on a high-density polyethylene platform.

# HPS-1000 Droplight - High Pressure Sodium Light System

## HPS-1000 Lamp

Power:	1000 watts
Lamp Type:	High pressure sodium with outer quartz envelope potted into stainless steel base
Light Output:	140,000 lumens
Diameter:	88.9 mm (3.5 in); 254 mm (10.0 in) with bowl reflector installed
Length:	480 mm (18.9 in)
Housing Material:	Electropolished 304 stainless steel
Protective Screen:	Electropolished 304 stainless steel
Weight in Air:	2.38 kg (5.25 lbs)
Weight in Water:	0.11 kg (0.25 lbs)
Operating Depth:	70 m (230 ft)
Connector:	BH-3-MLP, underwater mateable
Reflector Options:	Removeable, stainless steel bowl Removeable, side-looking reflector with support to sit in fuel assembly fixture

\*\*The HPS-1000 Droplight is designed for continuous use underwater, but can be operated in-air for reduced lifetime

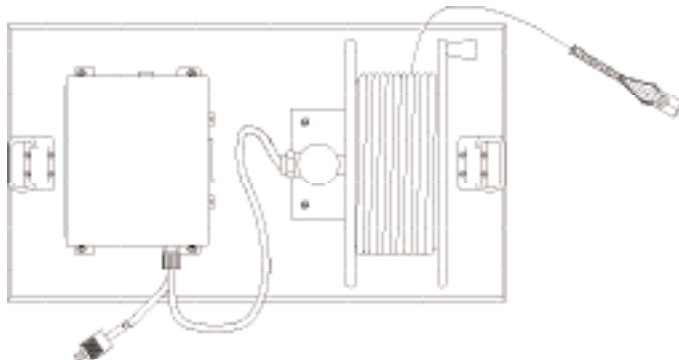


## HPS-1000 Ballast Power Supplies

Ballast Type:	In-Air Ballast
Power:	1000 watts
Input Voltage:	120 VAC, 60 Hz (230 VAC and 50 Hz available)
Housing Material:	Electropolished 304 stainless steel or Aluminum
Dimensions:	330 mm X 330 mm X 178 mm (13 in X 13 in X 7 in)
Weight in Air:	16.3 kg (36.0 lbs)
Cables:	IEEE-383 rated, polyurethane-jacketed, halogen free
Connector:	BH3F-SS-SPL underwater mateable
Mounts:	Optional guard rail hooks (stainless steel ballast only)

## Cable Management System

Cable Reel:	
Size:	356 mm X 457 mm X 508 mm (14 in X 18 in X 20 in)
Slip rings:	3 conductor
Mounting platform :	
Size:	914 mm X 508 mm X 25.4 mm (36 in X 20 in X 1 in)
Material:	High density polyethylene with lifting handles



Specifications subject to change without notice



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