DEEPSEA

FOR ALL YOUR SUBSEA NEEDS

Product Catalog 2026

DEEPSEA.COM

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For over 5 decades, DeepSea has set the standard for subsea cameras, light, power supplies and more. From the historic exploration of the *Titanic* to the most demanding ROV industrial inspections, our products are designed with a singular focus: uncompromising performance in the world's harshest environments.

Specifications subject to change without notice

Lighting

DeepSea LED solutions offer the highest lumens-per-watt in the industry, featuring intelligent thermal management to prevent the “browning” effects common in other subsea lights. Built for the harshest underwater environments, our lighting systems deliver exceptional brightness, efficiency, and durability across a range of commercial, scientific, and industrial applications.

Configurable spot, flood, and wide-beam patterns enable precise control over what you see and how you see it beneath the surface. These lights are available in multiple depth ratings — including 4,000 m, 6,000 m, and 11,000 m options — with robust housing materials such as hard-anodized aluminum or titanium to withstand severe hydrostatic pressures and corrosive saltwater environments.

Quick Comparison

Model	Output (Lumens)	Depth Rating	Key Features
LED SeaLite® 	Up to 10,000	6,000 m - 11,000 m	Highly configurable; sapphire port for extreme durability.
SeaLite Sphere® 	3,000 - 10,000	6,000 m	Compact, rugged design for versatile ROV/diver mounting.
Multiray™ LED SeaLite 	Variable	6,000 m	Dual-source LEDs with independent beam/color control.
Nano SeaLite® 	700	6,000 m - 11,000 m	Ultra-compact; ideal for tooling or small AUVs.

The DeepSea Lighting Advantage

True Lumens Testing	Intelligent Thermal Rollback	Serviceability
Unlike competitors who quote theoretical LED chip values, we use an in-house 1-meter integrating sphere to measure actual light output through the housing and port.	Our driver electronics automatically fold back power if the light overheats in air, preventing damage and returning to full power once submerged.	Most SeaLite models feature no-solder connections, allowing for field repairs without specialized tools.

Key Considerations for Selecting Subsea Lights

Light Output

When considering subsea lighting solutions, both total light output and how that light is distributed are critical factors. These values can be compared with lux (lumens distributed over 1sq meter) to understand the level of illumination with a specific configuration.

The DeepSea LED SeaLite® provides up to 10,000 lumens per luminaire, with a range of available angles from a narrow 35° spot beam (highest lux) to 115° wide flood beam angles (lowest relative lux) to tailor light distribution and resulting illuminance.

Beam Type (Spot vs. Flood)

Beam type is an important consideration, as it directly affects how light is distributed underwater. **Spot beams** concentrate light into a narrow pattern, making them ideal for long-distance visibility and focused inspections**. Flood beams** spread light over a wider area, providing more uniform illumination for navigation, general viewing, or imaging. Our SeaLites offer various beam configurations.

Strobe Capabilities

Strobe lighting is key for applications where controlled light pulses improve results. The **SeaStrobe LED SeaLite** configuration offers strobe capabilities.

Color Temperature & Monochromatic Options

Color temperature and spectral output also play an important role in underwater visibility and imaging. Cool white light in the 5,000K–6,500K range is generally preferred for accurate color representation and clear visuals in most subsea environments. For specialized applications, DeepSea offers monochromatic LED options including ultraviolet, infrared, and various visible wavelengths to support tasks such as leak detection and magnetic particle inspection.

Depth Rating

Ensuring the light's depth rating matches or exceeds the intended operating depth is essential for safe and reliable performance. DeepSea SeaLites are available in multiple depth ratings, including options up to 11,000 meters, enabling use from shallow-water inspections to full-ocean-depth exploration. Each depth class is engineered with appropriate materials, sealing methods, and structural design to withstand hydrostatic pressure without unnecessary size or weight.

Dimming & Control

Dimming and control capabilities provide users with precise command over light output and system behavior. DeepSea SeaLites support full digital and analog dimming, allowing operators to adjust intensity in real time to match changing conditions. Many models incorporate intelligent thermal rollback and performance monitoring to protect the light and extend service life. For advanced integration, the SeaSense™ Protocol enables enhanced control and diagnostic features within subsea systems.

Housing Material

Housing material selection is critical for durability and corrosion resistance in harsh marine environments. For long-term deployments or highly corrosive conditions, select DeepSea lighting models are available with titanium housings, providing exceptional strength, longevity, and resistance to seawater corrosion.

DEEPSEA

LED SeaLite®

UP TO 10,000 LUMENS

BEAM ANGLE OPTIONS

COLOR OPTIONS

FLICKER FREE

INTELLIGENT THERMAL MANAGEMENT

PHASE DIMMING

Our Flagship Lighting Product

A robust industry workhorse configurable for any application

The LED SeaLite meets the demands for the market challenges of today. This subsea light emits up to 10,000 lumens and is available in multiple LED, beam pattern, input voltage, and depth configurations. The standard sapphire port has a 6,000 m or 11,000 m depth rating and the optional acrylic port has a 4,000 m depth rating. The LED SeaLite includes a mounting bracket with titanium inserts.

The LSL-1000 and LSL-2000 models have a wide range of accepted voltage inputs as well as a low inrush current. Both digital and analog dimming interfaces support flicker-free dimming. This light comes standard with intelligent thermal protections that always put out the maximum light for the current operating temperature.

The LSL-2025 adds Multiray® technology to incorporate two sets of LED sources in a single fixture.

Monochromatic LED options and a range of white temperatures are available. Contact us to discuss your specific lighting needs.

Specifications subject to change without notice

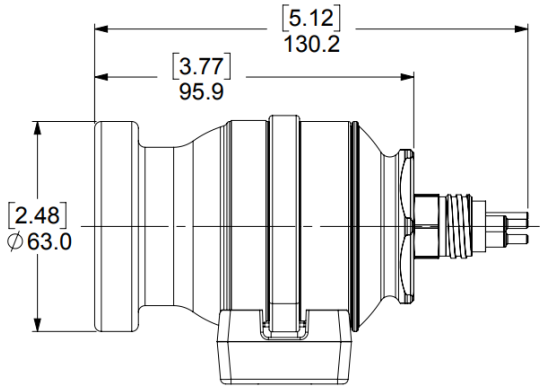
Specifications

LSL-	1000	2000	2025 Multiray	2075 SeaStrobe[1]
Optical Specifications				
Typical Lumen Output (Flood)	10,000		*See deepsea.com/multiray for sample configuration specifications*	10,000
Efficacy	63 lm/w[2]	94 lm/w[2]		100 lm/w
Lux at 1 m	Wide[3]: 2,300 lx Flood: 5,600 lx Spot: 14,000 lx			TBD
Color	Daylight White 5000 K ~ 6500 K Warm White 2600 K ~ 3700 K			Daylight White 5000 K ~ 6500 K Warm White 2600 K ~ 3700 K
CRI	Daylight White: 70 Warm White: 80			Daylight White: 70 Warm White: 80
Beam Angle (HPFW)	Wide[3]: 115° Flood: 75° Spot: 35°		Wide[3]: 115° Flood: 75° Spot: 40°	Wide[3]: 115° Flood: 75° Spot: 35°
Environmental Specifications				
LSL-	**1000**	**2000**	**2025 Multiray**	**2075 SeaStrobe**
Max Depth	4,000 m Acrylic Port 6,000 m or 11,000 m Sapphire Port			
Thermal Protection	Intelligent Thermal Rollback			
Operating Temp	-10°C to 40°C [14°F to 104°F][4]			
Storage Temp	-40°C to 100°C [-40°F to 212°F]			
Mechanical Specifications				
LSL-	**1000**	**2000**	**2025 Multiray**	**2075 SeaStrobe**
Housing	Hard Anodized 6013 Aluminum, Titanium			
Port	Standard: Sapphire, Optional: Acrylic			
Outer Diameter	63.0 mm [2.48 in]			
Weight in Air[5]	Sapphire Flood: 490 g Sapphire Spot: 510 g	Sapphire Flood: 450 g Sapphire Spot: 470 g		
Weight in Water[5]	Sapphire Flood: 240 g Sapphire Spot: 260 g	Sapphire Flood: 200 g Sapphire Spot: 220 g		
Electrical Specifications				
Voltage	90~140 VAC 50/60 Hz 110~160 VD	10~48 VDC[2]		
Power	160W @ 120 VAC 60 Hz	106W @ 24 VDC		
Dimming	RS232[6] , RS485[6], Phase/Triac	RS232[6] RS485[6], 0~5V, 0~10V, 4~20mA		RS232[6], RS485[6], Pulse Sync
Standard Connector[7]	SubConn MCBH3M SS (Phase/Triac), MCBH6 SS (RS232/RS485)	SubConn MCBH5M SS		SubConn MCBH6 SS

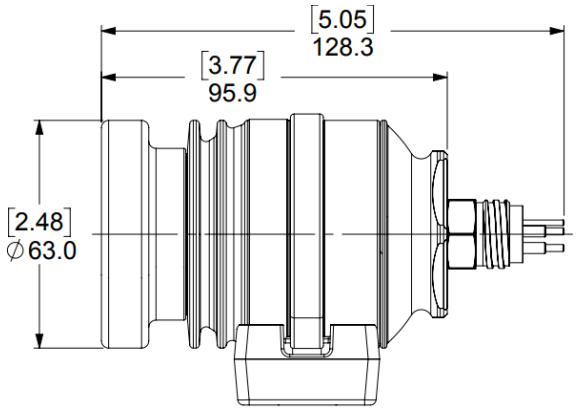
[1] Min pulse width: 1.3 ms | Max pulse width: ∞ | Min pulse period: 250 ms | Max pulse period: ∞
[2] 100% output available above 20 VDC. 50% output from 10~20 VDC due to input current limits.
[3] Wide beam angle only available on Acrylic port 4,000 m depth rating.
[4] For 120 VAC versions, thermal rollback may reduce light output in water temperatures exceeding 25° C [77° F]. See Operator's Manual for additional information.
[5] Nominal values are measured with MCBHMP connector and aluminum housing.
[6] For RS232 and RS485, see Operator's Manual.
[7] Ensure that ampacity ratings for interconnect system are suitable for your operating conditions. See Manual for more information.

Dimensions

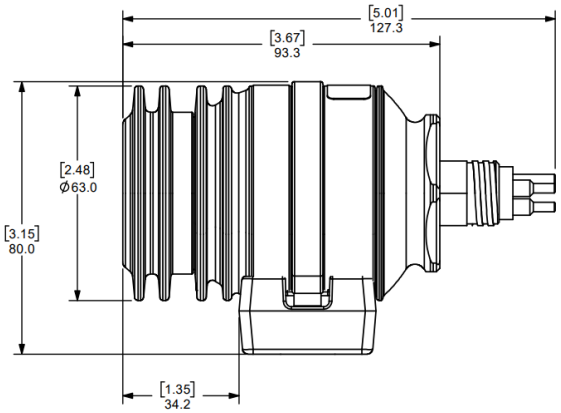
Flood/Wide Acrylic Aluminum



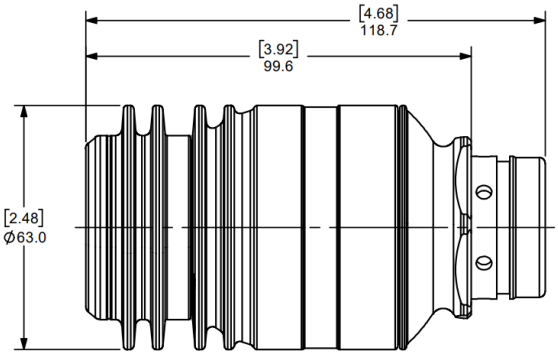
Flood/Wide Acrylic Titanium



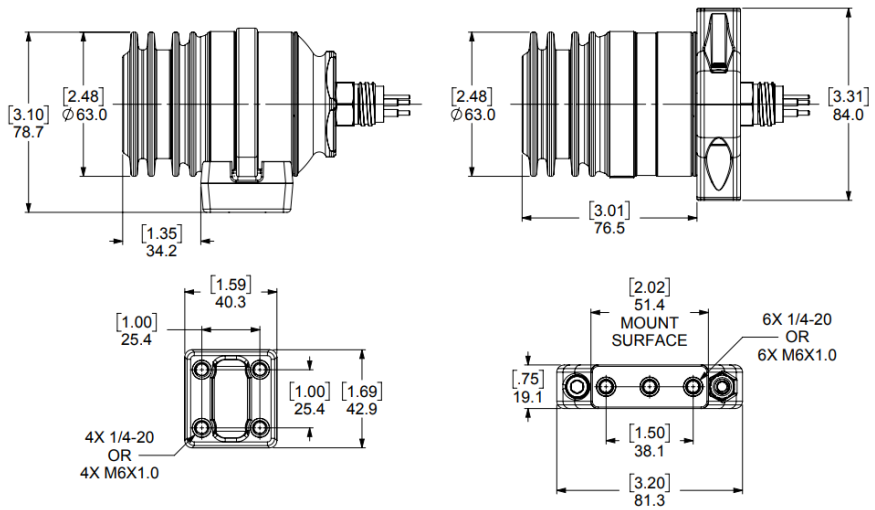
Flood Beam Sapphire Port



Spot Beam Acrylic/Sapphire Port



Brackets



DEEPSEA

SeaLite® Sphere

UP TO 10,000 LUMENS

BEAM ANGLE OPTIONS

COLOR OPTIONS

FLICKER FREE

INTELLIGENT THERMAL MANAGEMENT

PHASE DIMMING

Proven, Dependable Lighting

Versatility for a variety of subsea applications

The SeaLite Sphere 200 Series emits up to 10,000 lumens and offers multiple configuration options, including various beam angles, voltage tolerances, housing materials, and depth ratings of 6,000 m or 11,000 m. This LED light features flicker-free dimming and a field-serviceable connector. The isolated connector compartment adds a barrier of protection from connector failures. Intelligent thermal rollback prevents overheating.

The SeaLite Sphere 200 Series includes a mounting bracket with titanium inserts.

Specifications subject to change without notice

Specifications

SLS-	SLS-6200	SLS-8200
Optical Specifications		
Typical Lumen Output (Flood)[8 9]	9,000	10,000
Efficacy with Flood Configuration[8 9]	53 lm/w	77 lm/w
Lux	5,600 lx	6,100 lx
Color Options	Daylight White 5000 K ~ 6500 K Warm White 2600 K ~ 3700 K *Other options available*	
CRI	Daylight White: 70 Warm White: 80	
Beam Angle	Flood: 75° Spot: 35°	Flood: 80°
Environmental		
Depth Rating	Standard: 6,000 m, Optional: 11,000 m[10]	
Thermal Protection	Thermal Rollback	
Operational Temperature	-10°C to 40°C [14°F to 104°F]	
Storage Temperature	-25°C to 105°C [-13°F to 221°F]	
Electrical		
Voltage	110~140 VAC, 120~150 VDC	215~275 VAC, 275~375 VDC
Power	169 W @ 120 V 60 Hz	130 W @ 275 VAC, 130 W @ 375 VDC
Dimming	AC phase control (TRIAC) Variable voltage (VARIAC)	AC phase control (TRIAC) Variable voltage (VARIAC)
Mechanical		
Housing	Standard: Hard Anodized 6013 Aluminum, Optional: Titanium	
Port	Sapphire	
Outer Diameter	82.1 mm [3.23 in]	
Length without Connector	136.7 mm [5.38 in]	
Weight in Air Aluminum with MCBHMP Connector	824 g [1.82 lbs.]	
Weight in Water Aluminum with MCBHMP Connector	320 g [0.71 lbs.]	
Connector		
Standard Connector	SubConn MCBHMP *Contact Sales for more options*	

[8] For SLS-6200, nominal values are measured with 8-LED flood configuration, VIN = 120 VAC 3

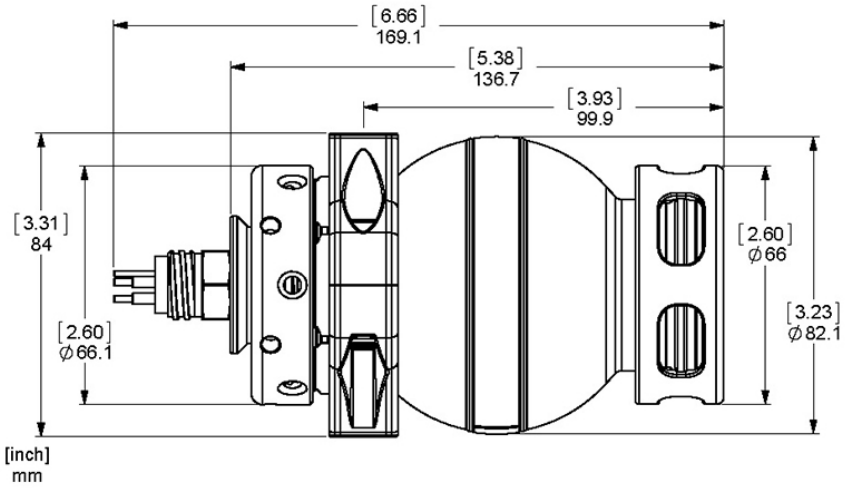
[9] For SLS-8200, nominal values are measured with 32-LED flood configuration, VIN = 275 VAC 5

[10] 11,000 m depth rating requires titanium housing and 20 kpsi rated connector

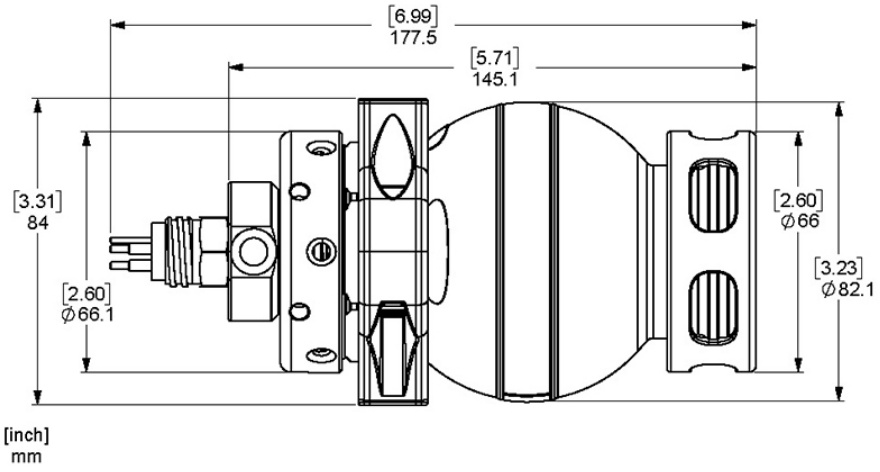
Dimensions

SLS-6200 / SLS-8200

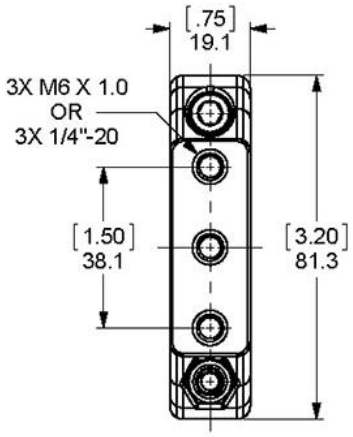
Base Endcap



Optional Extended Endcap with Zinc Anodes



Bracket



DEEPSEA

Nano SeaLite®

UP TO 700 LUMENS

70° FLOOD BEAM ANGLE

COLOR OPTIONS

UP TO 11 KM DEPTH RATING

ULTRA COMPACT & LIGHTWEIGHT

10-36 VDC INPUT POWER

Ultra-Compact and Lightweight

Our smallest light ideal for confined, small spaces

The Nano SeaLite is our smallest light and emits up to 700 lumens. This LED light comes in a titanium housing and has an optional 11,000 m depth rating. Divers and inspection class ROVs use this subsea light for its size and weight. The Nano SeaLite includes a mounting bracket and can be paired with the Nano SeaCam on a dual mounting bracket.

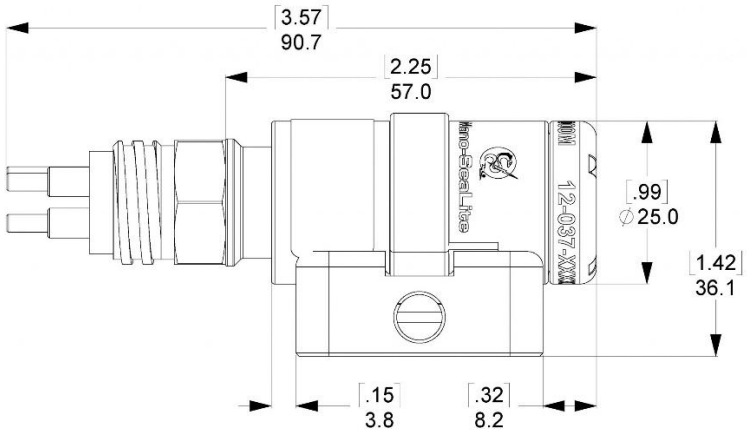
Specifications subject to change without notice

Specifications

Nano SeaLite	
Optical	
Typical Lumens Output	700
Standard Colors	Daylight White 5000 K – 6500 K Other options available
Flood Beam Angle	70°
Environmental	
Depth Rating	6,000 m standard 11,000 m optional[1] Contact sales for 11,000 m depth rated connector options.
Operational Temperature	-10° C to 50° C (14° F to 122° F)
Electrical	
Voltage	10~36 VDC
Power	14 W
Mechanical	
Housing	Titanium 6Al-4V
Port	Sapphire
Outer Diameter	25 mm (0.99 in)
Overall Length without connector	54.5 mm [2.15 in] : 6,000 m depth rating 68.6 mm [2.70 in] : 11,000 m depth rating
Weight in Air	140 g [4.9 oz] : 6,000 m depth rating 160 g [5.6 oz] : 11,000 m depth rating
Weight in Water	100 g [3.5 oz] : 6,000 m depth rating 47 g [1.7 oz] : 11,000 m depth rating
Connector	
Standard Connector	SubConn MCBHM4/SS *Contact Sales for more options*

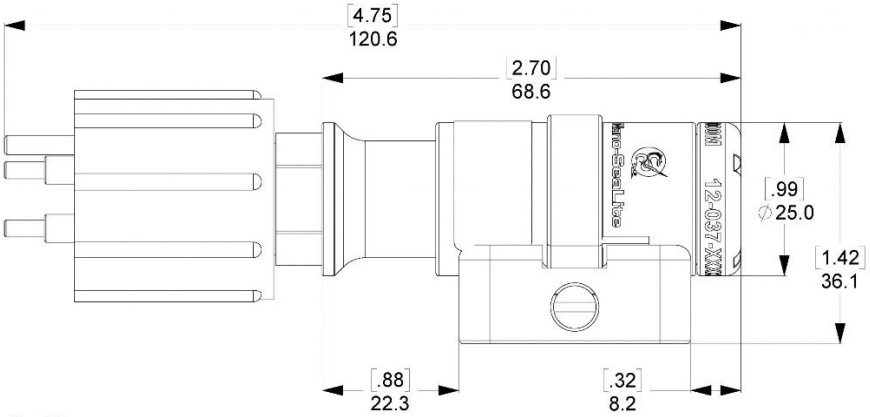
Dimensions

6,000 m Depth Rating



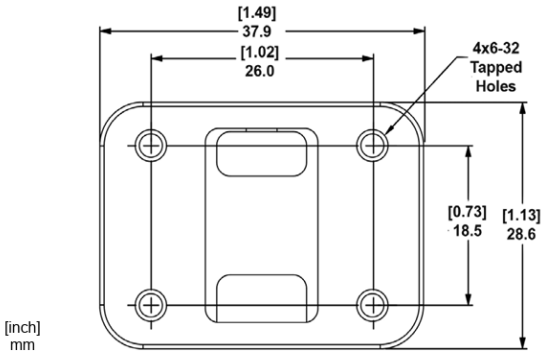
[inch]
mm

6,000 m Depth Rating



[inch]
mm

Bracket



[inch]
mm

Cameras

DeepSea cameras deliver exceptional subsea imaging performance across a wide range of underwater applications — from high-resolution 4K inspection and documentation to low-light situational awareness and tooling support. Engineered for clarity and durability in harsh marine environments, our camera systems use proprietary corrector optics and precision sapphire or glass dome ports to minimize distortion and deliver sharp, true-to-scene imagery at depth.

Our camera portfolio spans compact analog and HD models for routine ROV piloting and inspection tasks to advanced digital systems that support IP streaming, onboard recording, and 4K UHD video.

DeepSea cameras are built with robust housings and depth-rated for demanding subsea operations, with options that support full-ocean-depth deployments up to 11,000 meters when paired with appropriate ports and connectors. Sapphire port windows, titanium housings, and corrosion-resistant assemblies ensure long service life and reliable operation in saltwater environments.

Whether deployed on ROVs, AUVs, manned submersibles, or fixed platforms, our cameras provide high-quality imaging, versatile control interfaces, and rugged construction that professionals trust for inspection, scientific research, navigation, and storytelling in the world's oceans.

The DeepSea Cameras Advantage

Optical Precision
While competitors often use off-the-shelf ports, DeepSea designs custom dome and flat port optics to maintain a wide field of view without the "fisheye" edge distortion.

FleXlink® Technology

A cost-effective alternative to delicate fiber optics, allowing HD video transmission over existing copper tethers.

Depth and Durability
Available in multiple depth ratings up to FOD, DeepSea camera housings ensure long-term reliability in extreme pressure and corrosive environments.

Camera Comparison

View interactive camera comparison online at *www.deepsea.com/cameras*.

Camera	Depth Rating	HFOV	Optical Zoom	Sensor	Max Resolution	Transmission Type(s)	Connector	Voltage	Power	Housing	Weight	Oper Temp
4K UHD CAMERAS												
 **MxD® SeaCam®** *The ultimate 4k imaging system for subsea exploration*	7 km	8.4° to 96.3°	15x, 2x tele-extender	3-chip 2/3" type 4K CMOS	3840×2160 QFHD	Fiber	SubConn Optolink 1FO	24-48 VDC	35 W Max	Titanium	46.1 kg (Air) 24 kg (Water)	-8°C to 27°C
 **Optim SeaCam®** *Premium 4K UHD video*	6 km, 11 km Option	78°	15.5x	1/2.5" CMOS Progressive Scan	3840×2160	Coax, Fiber, FleXlink, Ethernet	SubConn DBH13M	10~36 VDC	12 W Max	Titanium	6.86 kg (Air) 2.73 kg (Water)	-5°C to 40°C
IP CAMERAS												
 **IP Optim SeaCam®** *Premium 4K UHD video over IP*	6 km, 11 km Option	78°	15.5x	1/2.5" CMOS Progressive Scan	3840×2160	Ethernet	SubConn DBH13M	10~36 VDC	12 W Max	Titanium	6.86 kg (Air) 2.73 kg (Water)	-5°C to 40°C
 **HD Multi SeaCam® - IP** *Compact HD imaging over IP*	6 km, 11 km Option	105° to 150°	-	Multiple options	1920×1080	Ethernet	SubConn DBH8M (Ethernet)	10~36 VDC, PoE IEEE802.3af	2 W Max	Titanium	0.56 kg (Air) 0.32 kg (Water)	0°C to 40°C

Camera	Depth Rating	HFOV	Optical Zoom	Sensor	Max Resolution	Transmission Type(s)	Connector	Voltage	Power	Housing	Weight	Oper Temp
MACHINE VISION CAMERAS												
 **SmartSight® MV100** *Transforming vision into insight*	6 km, 11 km Option	32° to 125°	-	Multiple options	2048×1536	Gig-E	SubConn DBH13M	10-48 VDC	2.7 W Max	Titanium	0.65 kg	-10°C to 40°C
HD CAMERAS												
 **HD Multi SeaCam®** *Compact and configurable HD imaging*	6 km, 11 km Option	40° to 150°	-	Multiple options	1920×1080	Coax, FleXlink, Ethernet	SubConn DBH8M	10~36 VDC, PoE IEEE802.3af	2 W Max	Titanium	0.56 kg (Air) 0.32 kg (Water)	0°C to 40°C
 **HD Zoom SeaCam®** *30x optical zoom capability*	2 km (Al) 6 km (Ti)	1° to 27°	30x	1/2.8” 2.1MP CMOS	1920×1080	Coax, FleXlink	SubConn DBH8M	10-36 VDC	9 W Max	Aluminum / Titanium	2.18 kg / 2.73 kg (Air) 0.62 kg / 1.16 kg (Ti)	-5° to 60°C
 **Vertex SeaCam®** *Dynamic controls with up to 10x image zoom*	6 km, 11 km option	79°	10x	1/3” CMOS Progressive Scan	1920x1080	Coax, Fiber, FleXlink	SubConn DBH8M	10-36 VDC	7 W Max	Aluminum	3.84 kg (Air) 1.81 kg (Water)	-5° to 40°C

Camera	Depth Rating	HFOV	Optical Zoom	Sensor	Max Resolution	Transmission Type(s)	Connector	Voltage	Power	Housing	Weight	Oper Temp
ANALOG CAMERAS												
 **Nano SeaCam®** *Ultra-compact size for confined spaces*	6 km	44°	Fixed	1/3" SONY Color CCD II 410K	620 TVL	Analog	SubConn MCBH4MP	7-32 VDC	2 W Max	Titanium	0.13 kg (Air) 0.09 kg (Water)	-10°C to 50°C
 **Super Wide-i SeaCam®** *The widest of any DeepSea camera*	6 km, 11 km option	150°	Fixed	1/3.2" 1.3 MP CMOS Rolling Shutter	600 TVL	Analog	SubConn MCBH4M	10-36 VDC	0.93 W Max	Titanium	0.49 kg (Air) 0.26 kg (Water)	-10° to 50°C
 **Wide-i SeaCam®** *Perfect for day-to-day underwater applications*	6 km	125°	Fixed	1/3.2" 1.27 MP CMOS	600 TVL	Analog	SubConn MCBH4M	10-36 VDC	1.8 W Max	Titanium	0.49 kg (Air) 0.25 kg (Water)	-10° to 50°C
 **Multi SeaCam®** Reliability with a range of configurations	6 km	63°	Fixed	1/3.2" CMOS Image Sensor	600 TVL	Analog	SubConn MCBH4M	10-36 VDC	0.93 W Max	Titanium	0.46 kg (Air) 0.11 kg (Water)	-20° to 40°C
 **LED Multi SeaCam®** Reliability and built-in LEDs	4 km	64°	Fixed	1/3.2" CMOS Image Sensor	600 TVL	Analog	SubConn MCBH4M	10-36 VDC	3.2 W Max	Titanium	0.46 kg (Air) 0.11 kg (Water)	-20° to 40°C

SmartSight® MV100

GLOBAL SHUTTER

POWER OVER ETHERNET

TRIGGERING AND SYNCHRONIZATION

HIGHLY CONFIGURABLE

MACHINE VISION READY

AVAILABLE SDK

Transforming Vision into Insight

Precision imaging for subsea and autonomous applications

The SmartSight® MV100 camera combines best-in-class Sony Pregius global shutter sensors with GigE Vision modules, making it ideal for subsea machine vision. Its low power consumption and flexible integration make it a perfect fit for autonomous vehicles, while the compact design allows installation virtually anywhere. With multiple sensor and lens options, the SmartSight® MV100 can be tailored to suit nearly any imaging application.

SDK Available

The SmartSight MV100 utilizes a GUI (Graphical User Interface) application which serves as the primary interface for interacting with the SmartSight MV100 system. To utilize this GUI, users will need to have the Spinnaker Full SDK downloaded.

Specifications subject to change without notice

Specifications

MV100-	D-T-BFS		F-T-BFS	
Optical Specifications				
Lens Options	2.3mm F/2.8	2.7mm F/2.9	2.7mm F/2.9	6.0mm F/5.6
Sensor Options	0.4MP, 1.6MP, 2.3MP, 3.2MP Global Shutter			
Environmental Specifications				
Max Depth	6,000 m (11,000 m option*)		6,000 m	
Operating Temp	-10 to 40°C [14°F to 104°F]			
Storage Temp	-30 to 60°C [-22°F to 140°F]			
Mechanical Specifications				
Housing	Titanium housing		Titanium housing	
Optical Port	Borosilicate Dome Port		Borosilicate Flat Port	
Mounting Bracket	Saddle bracket with either metric M6 or 1/4-20 imperial titanium inserts			
Weight in Air	0.65 kg [1.4 lbs.]		0.65 kg [1.4 lbs.]	
Weight in Water	0.37 kg [0.84 lbs.]		0.44 kg [1.0 lbs.]	
Electrical Specifications				
Interface	10/100/1000 BaseT Ethernet, GigE Vision v1.2 Compliant			
Inputs/Outputs	Isolated: 1 IN, 1 OUT			
Power	2.7W maximum			
Voltage	10-48VDC, PoE IEEE802.3af-2003			
Standard Connector	SubConn DBH13M Stainless Steel			

*Please contact Sales for applications requiring 11,000 m rating

Sensor Options

Sensor Option	Sony IMX287	Sony IMX273	Sony IMX392	Sony IMX265
Sensor Resolution	0.4MP	1.6MP	2.3MP	3.2MP
Pixel Array	720 x 540	1440 x 1080	1920 x 1200	2048 x 1536
Pixel Size	6.9 µm x 6.9 µm	3.45 µm x 3.45 µm	3.45 µm x 3.45 µm	3.45 µm x 3.45 µm
Frame Rate	286 FPS (291 FPS)	71.6 FPS (75.8 FPS)	48.3 FPS (52 FPS)	35.4 FPS (38 FPS)
LLC Frame Rate[11]	350	111	80	51
Sensor Type	Color, Mono	Color, Mono	Color, Mono	Color, Mono
Shutter	Global	Global	Global	Global

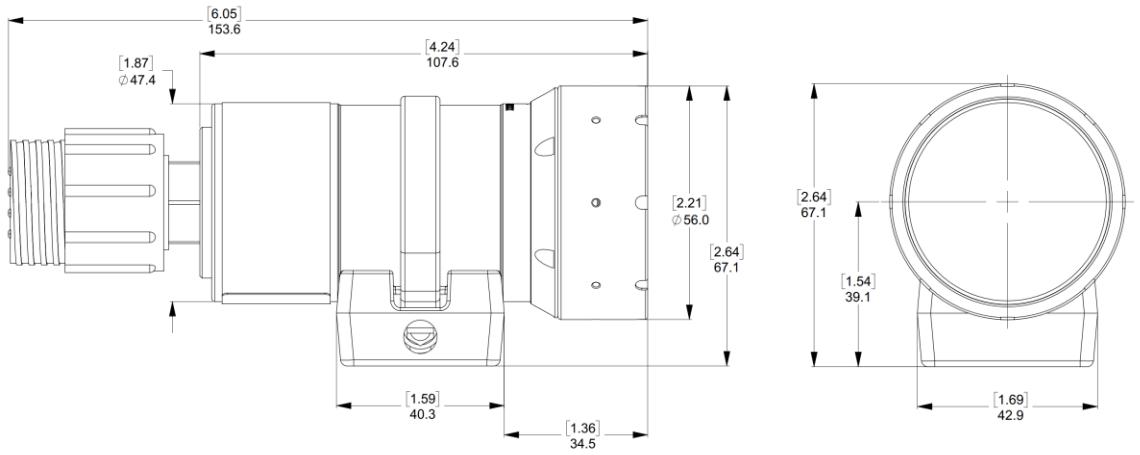
Field of View Reference (Horizontal)

Sensor Option	6mm/Flat	2.7mm/Flat	2.7/Dome	2.3mm/Dome
0.4 MP	32°	67°	101°	117°
1.6 MP	32°	67°	101°	117°
2.3 MP	40°	80°	105°	125°
3.2 MP	43°	83°	120°	N/A

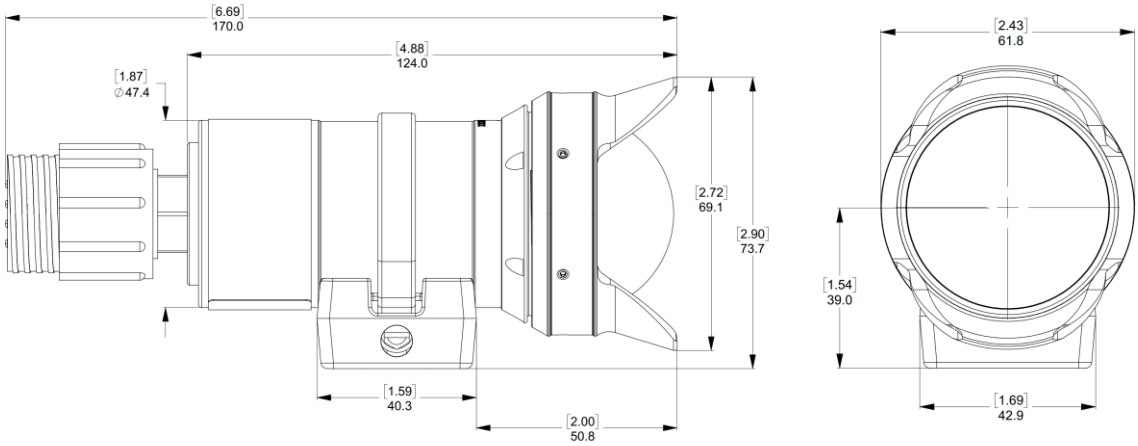
[11] LLC = Lossless Compression. Option only available on select BFS type modules.

Dimensions

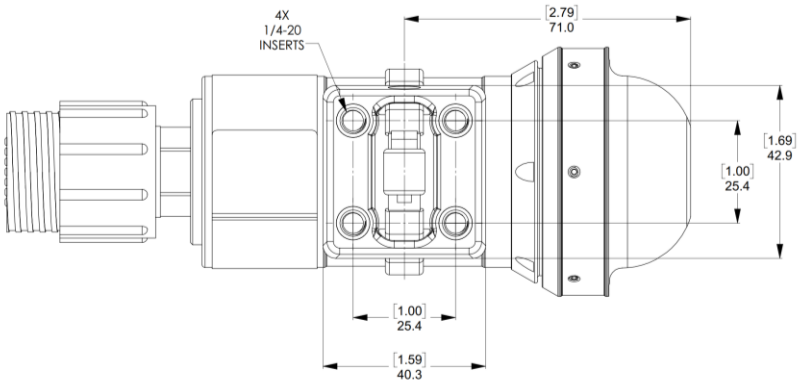
Flat Port



Dome Port With Cowl

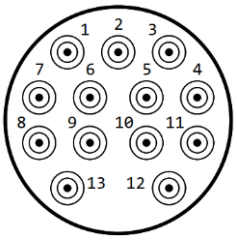
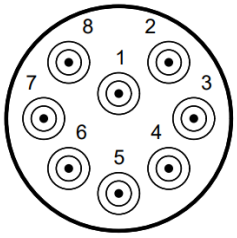


Mounting Bracket



Standard Pinouts

HD-SDI Coax and FleXlink Configurations

	SubConn DBH13M	SubConn DBH8M		Schilling Robotics SEANET
	 *MALE PIN VIEW*	 *MALE PIN VIEW*		
PIN	**Ethernet Camera Discrete Power 10/100/1000 Mbps**	**Ethernet Camera Discrete Power 10/100Mbps**	**Ethernet Camera PoE 10/100/1000 Mbps**	**IP Camera NIM**
1	DC-	DC-	TxRx D- | 0V PoE	DC+
2	SCREEN	DC-	TxRx D+ | 0V PoE	DC-
3	DC+	DC+	TxRx C+ | 48V PoE	CHASSIS
4	TxRx D-	DC+	TxRx C- | 48V PoE	RD-
5	TxRx D+	TD-	TxRx A- | TD-	RD+
6	TxRx C+	TD+	TxRx A+ | TD+	TD-
7	TxRx C-	RD-	TxRx B- | RD-	TD+
8	TxRx A-	RD+	TxRx B+ | RD+	
9	TxRx A+			
10	TxRx B-			
11	TxRx B+			
12	OPTO OUT			
13	OPTO IN			
ID	**13C009**	**08E021**	**08E025**	**07E004**

DEEPSEA

MxD SeaCam®

- 4K ULTRA HD
- CUSTOM CORRECTOR OPTICS
- 15X OPTICAL ZOOM
- 3-CMOS 2/3" SENSORS
- 96° HORIZONTAL FIELD OF VIEW
- OPTIONAL 2X TELECONVERTER

The *Ultimate* 4k Imaging System For Subsea Exploration

Broadcast-grade performance for filmmakers, storytellers, and explorers

At the heart of the MxD is the subsea imaging unit, based on a Sony HDC-50 compact broadcast camera with the performance and advanced features of full-sized studio systems. The 4K-UHD resolution 2/3" class 3-CMOS global shutter optical block provides unparalleled sensitivity, sharpness, support for HDR (hyper gamma) and the full BT.2020 color space along with the full range of controls expected from a no-compromise, future-proof studio grade platform.

The imaging potential is matched with a best-in-class Canon CJ15ex4.3 wide-angle zoom lens with 15x magnification, providing a 96° horizontal field of view at full wide and just 8.4° at full telephoto. This lens is coupled with a custom 4-element dome port corrector cell for near zero distortion viewing and diffraction limited performance from 0.3 meters to infinity. The purpose-built Titanium housing and borosilicate dome of the MxD SeaCam provide reliable operation to 4,000 m, with options for up to 7,000 m depths using a patent pending design, proven across thousands of actual pressure cycles.

PRELIMINARY

Specifications

	MxD SeaCam
Optical Specifications	
Sensor	3-chip 2/3-inch type 4K CMOS
Shutter	Global Shutter
Resolution	QFHD: 3840 x 2160 HD: 1920 x 1080
Color Space	ITU-R BT.2020 wide color gamut
Sensitivity (2000lx, 3200K)	F10 (59.94 fps), F11 (50 fps)
Noise Level	62 dB
Format	QFHD: 4K/59.94p, 4K/50p FHD: 1080/59.94p, 1080/50p HD: 720/59.94p, 72/50p
Zoom	15x optical zoom Optional 2x extender
Focal Length	4.3 to 65 mm
Maximum Aperture	F/1.8 at 4.3 ~ 40 m | F/2.9 at 65 mm
Field of View	Wide: 96.3° x 64.2° | Tele: 8.4° x 4.8°
Minimum Object Distance	0.3 m
Environmental Specifications	
Depth Rating	7,000 m / 10,300 PSI
Operating Temp	-8°C to 27°C [1.6°F to 80.6°F]
Storage Temp	-20°C to 60°C [-4°F to 140°C]
Mechanical Specifications	
Housing	Titanium
Port	Borosilicate Glass
Weight in Air	46.1 kg [101.6 lbs.]
Weight in Water	24 kg [53 lbs.]
Control	
Camera Control	RM-B170 Remote Control Unit Optional RCP-3100/3500 Remote Control Panel
Zoom	Variable rate servo zoom control
Focus	Variable position servo focus control
Inputs/Outputs	
Fiber Optic	Single Mode, 4-channel CWDM per ITU-T G.694.2, 20 nm spacing
12G-SDI Video	12G-SDI Video Primary uplink wavelength: 1511 nm SMPTE ST 2082, up to 4K/60p Secondary uplink wavelength: 1531 nm SMPTE ST 2082, up to 4K/60p (duplicate feed)
Telemetry & Control	Telemetry uplink wavelength: 1471 nm Telemetry downlink wavelength: 1491nm
LAN	Camera setup and control
HD-SDI Monitor	SMPTE 292M, live view utility monitor output with overlay options
Camera & Iris Control	RS-422 or Ethernet, proprietary Sony protocol
Zoom & Focus Control	RS-232 or Ethernet, proprietary DeepSea protocol
System Monitor	Temperature, Humidity, Barometric Pressure, Leak Detection
Input Voltage	24 to 48 VDC
Input Power	35 W Max

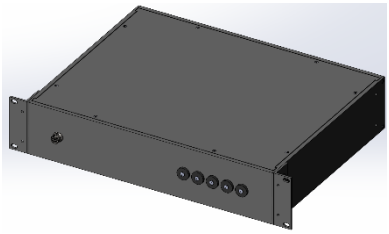
PRELIMINARY

MxD SeaCam System Components

The MxD SeaCam system comprises of three main components: the MxD SeaCam camera, the MxD Telemetry Multiplexer, and the MxD Operator Control Panel.

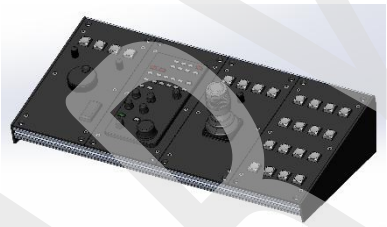
MxD SeaCam

The subsea camera at the heart of the MxD SeaCam. Rated for 7000 m operations with up to three bulkheads for fiber optic telemetry, power, and auxiliary power and data interfaces (Ethernet, RS-232/485).



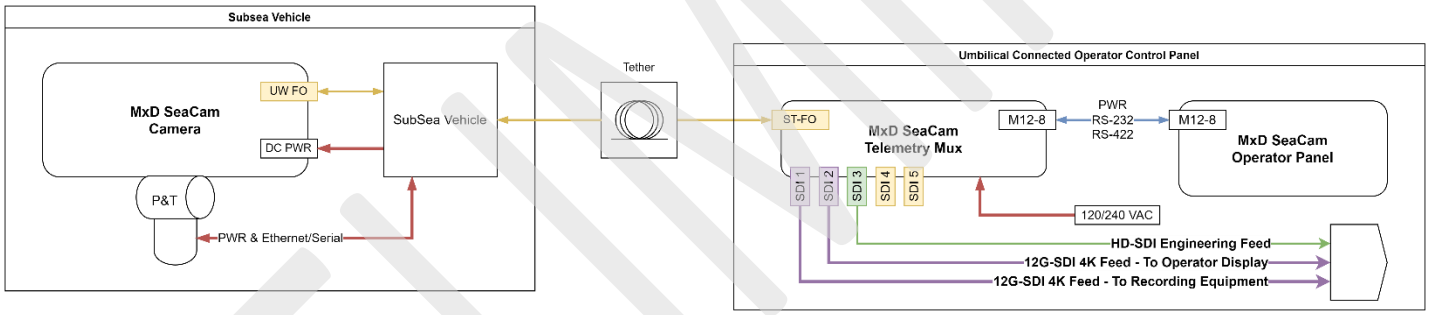
MxD Telemetry Multiplexer

The topside interface for the MxD SeaCam. Connects to the fiber optic data-link coming from the camera and breaks out the 4K video signals, Ethernet and serial data for command and control of the subsea camera and lens.



MxD Operator Control Panel

A custom control panel housing the physical operator controls for camera iris, zoom, and focus functions. The modular design allows for easy optimization of layout tailored to the video production workflow.

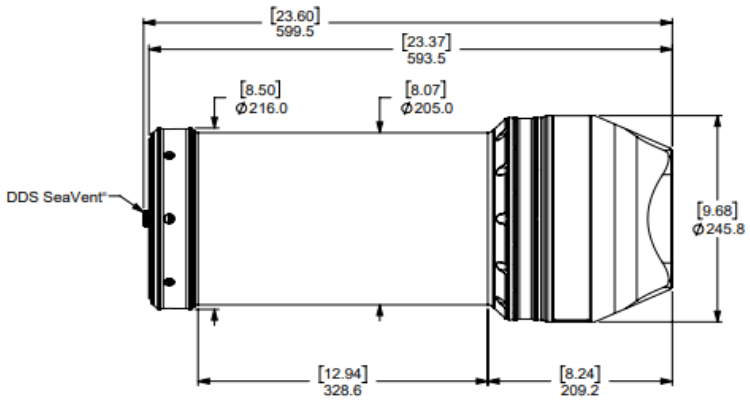


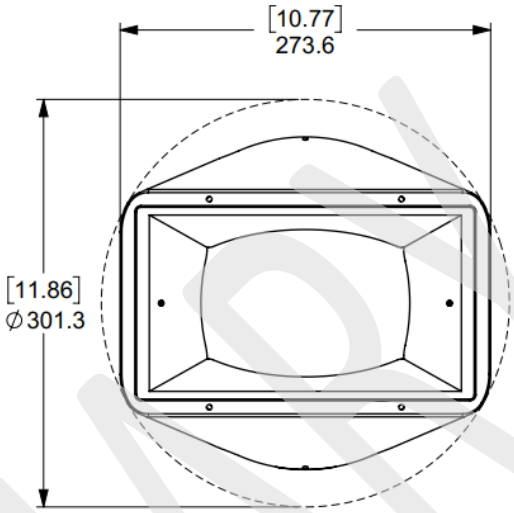
Integration Requirements

	MxD SeaCam	MxD Telemetry Multiplexer	MxD Operator Control Panel
Power	24-48 VDC, 35 W Max 1.5 A @ 24 VDC	100-240 VAC 50-60 Hz 1.3 A Max	12 VDC, ~ 2A *Powered through umbilical or external AC-DC power supply.*
Data	Dark fiber or ODA supporting CWDM channels 1471, 1491, 1511, and 1531 nm	• Fiber optic link to camera • Control panel umbilical • Ethernet LAN	• Umbilical to Telemetry Mux • Ethernet LAN
Connections	Fiber: SubConn Optolink 1FO Copper: SubConn MCBH6M *Other connectors can be fitted to the MxD SeaCam based on customer requirements.*	• Telemetry Fiber: ST-type • Power: IEC 60320-C14 • LAN 1, 2: RJ-45 • Umbilical: M12 (8-pin) • SDI 1, 2, 3: BNC COAX • SDI 4, 5: ST-type 1310 nm	• Power: DIN • Umbilical: M12 (8-pin) • LAN 1, 2: RJ-45
Mechanical	Mounting bracket not included. Designs available for Kystdesign KPT-45 pan-and-tilt units. *See O&I drawing for details.*	2RU 19" rack mount enclosure *See O&I drawing for details.*	Bench-top enclosure *See O&I drawing for details.*

PRELIMINARY

Dimensions





Downloads

For reference documentation and 3D models, check the online file share:

https://files.seescan.com/url/mxdseacam

PRELIMINARY

DEEPSEA

Optim SeaCam®

15.5X OPTICAL ZOOM

4K ULTRA HD

LOW LATENCY

6G-SDI FIBER OR COAX

350 MM MINIMUM OBJECT DISTANCE

UP TO 11 KM DEPTH RATING

Premium 4K Ultra-High-Definition Video

A unique, rugged tool for scientists, subsea explorers, and filmmakers

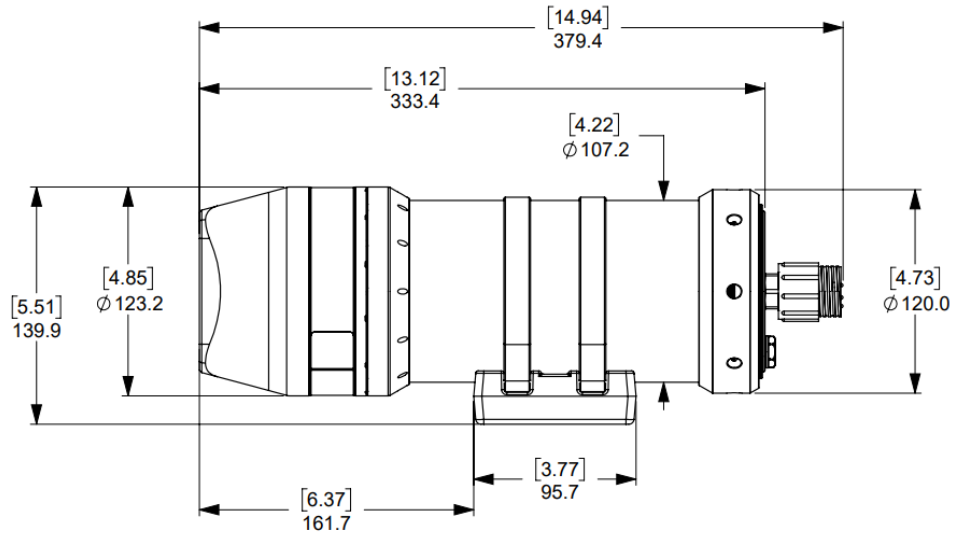
The Optim SeaCam holds the distinction of being the first 4K camera to dive to the deepest place in the ocean: Challenger Deep in the Mariana Trench, more than 10 km down. Ideal for real-time viewing in 4K and optimal for discovery, documentation, and storytelling, the Optim SeaCam features an extended zoom range and a 350 mm minimum object distance at full telephoto that makes for stunning close-up images and brings out the smallest details. Familiar VISCA controls make the Optim a logical upgrade path from legacy HD systems, while being sized to fit almost any platform from medium inspection class vehicles to large crewed submersibles.

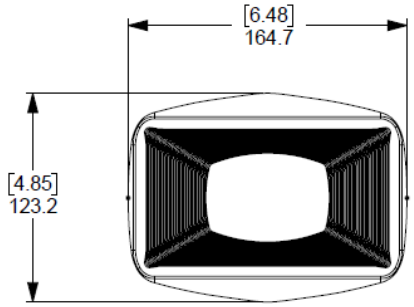
Specifications subject to change without notice

Specifications

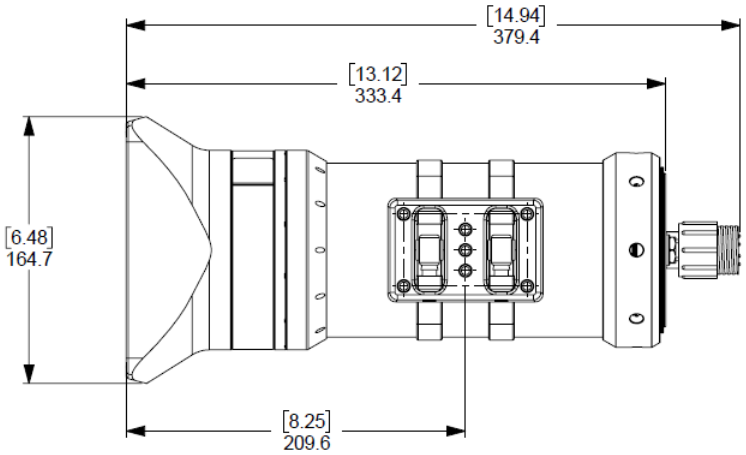
OSC-	2080-CX	2080-FO	2080-IP
Optical Specifications			
Lens	5.7 mm to 88.4 mm F/2.0 to F/3.8		
Optical Zoom	15.5x		
Focus	Wide: 50 mm to Infinity Tele: 350 mm to Infinity		
FOV in Water	Wide: 86° D x 78° H x 48° V		
Video Specifications			
Image Sensor	1/2.5" CMOS Progressive Scan		
Faceplate Illumination	0.35 Lux (50 IRE)		
Scene Illumination	1.2 Lux (50 IRE)		
Maximum Resolution	3840 x 2160		
Video Formats	**4K UHD:** 2160p/29.97, 2160p/25 **HD:** 1080p/59.94, 1080p/50, 1080p/29.97/25, 1080i/59.94/50, 720p/59.94/50/29.97/25		
Video Transmission	**4K UHD:** 6G-SDI (SMPTE ST 2081), **HD:** 3G-SDI (SMPTE 424M), HD-SDI (SMPTE 292)		**Ethernet** HEVC (h.265), AVC (h.264)
Onboard Recording	None		Yes, 256 GB up to 1TB
Typical Latency	< 1 frame		<500 ms
Control Options	RS-232, RS-485 using SeaSense™ Protocol, VISCA Discrete tristate control for zoom, focus, auto focus, white balance		VISCA (over Ethernet)
Environmental Specifications			
Depth Rating	6,000 m 11,000 m (Option)		
Operating Temp	-5 °C to 40 °C [23 °F to 104 °F]		
Storage Temp	-20 °C to 60 °C [-4 °F to 140 °F]		
Mechanical Specifications			
Housing	6Al-4V Titanium		
Port	Optical glass dome		
Weight in Air	6.85 kg [15.1 lbs.]		
Weight in Water	2.73 kg [6.02 lbs.]		
Electrical Specifications			
Voltage	10~36 VDC		
Power	10 W Max	12 W Max	
Standard Connector	Coax: SubConn HFCX75BH6M FleXlink: SubConn DBH8M	Electrical: SubConn MCBH6M Fiber: SubConn OptoLink 1FO	SubConn DBH13M

Dimensions





Brackets



HD Multi SeaCam®

- FULL HD 1080P/ 30 VIDEO OUTPUT
- 40-150° HORIZONTAL FOV
- SCRATCH-RESISTANT SAPPHIRE PORT
- UP TO 11 KM DEPTH RATING
- FLEXLINK CONNECTOR OPTION
- COAX CONNECTOR OPTION

Compact and Highly Configurable HD Imaging

A versatile choice for science and industrial use

The HD Multi SeaCam delivers high-quality HD-SDI 1080p/30 video in a compact housing. This subsea camera has minimal distortion in both the 72° HFOV flat port and the 105° HFOV dome port Options include flat sapphire or glass dome port housing and SDI or IP video formats. FleXlink® and coax transmission methods are available. The HD Multi SeaCam includes a mounting bracket with titanium inserts.

Specifications subject to change without notice

Specifications

Optical Specifications						
HDMSC-	**4040**	**4070**	**4085**	**4105**	**4125**	**4150**
Port Type	Flat			Dome		
Lens	6 mm, *f*/4.0	2.7 mm, *f*/2.9	2.33 mm, *f*/2.9	2.7 mm, *f*/2.9	2.33 mm, *f*/2.9	1.97 mm, *f*/3.0
Focus	100 mm-∞					
Horizontal Field of View (Water)	40°	72°	85°	105°	125°	150°
Min. Faceplate Illumination Color [Mono[12]]		0.095 [0.002] Lux		0.095 [0.002] Lux		

Sensor and Video Format Specifications				
HDMSC-	**4040/70/85-CX/FX**	**4105/25/50-CX/FX**	**4040/70/85-IP**	**4105/25/50-IP**
Image Sensor	Sony 1/2.8 inch class Back Side Illuminated CMOS Sensor			
Resolution	1920x1080			
Sensor Chroma	RGB Color		RGB Color, Monochrome Option	
Video Format	1.5 Gbps HD-SDI 1080/30/25p, 720/60/50/30/25p		h.264 1080/30/25p, 720/60/50/30/25p	
Transmit Type	Coax or FleXlink		Ethernet	
Recording Type	N/A		Video, time-lapse	
Memory	N/A		256 GB microSD, up to 1 TB	

Environmental Specifications				
HDMSC-	**4040/70/85-CX/FX**	**4105/25/50-CX/FX**	**4040/70/85-IP**	**4105/25/50-IP**
Max Depth Rating	6000 m	6000 m 11,000 m Option	6000 m	6000 m 11,000 m Option
Operating Temp	-30° C to 50° C [-22° F to 122° F]		0° C to 40° C [32° F to 104° F]	
Storage Temp	-30° C to 70° C [-22° F to 158° F]		-30° C to 70° C [-22° F to 158° F]	

Mechanical Specifications				
HDMSC-	**4040/70/85-CX/FX**	**4105/25/50-CX/FX**	**4040/70/85-IP**	**4105/25/50-IP**
Housing	Titanium	6km Titanium 11km: Titanium, Stainless Steel[13]	Titanium	6km Titanium 11km: Titanium, Stainless Steel[13]
Optical Port	Sapphire	Borosilicate Glass	Sapphire	Borosilicate Glass
Mounting Bracket	Injection molded saddle bracket with 4x M6 or 1/4-20 titanium inserts on 25.4mm centers, 316-SS hose clamp			
Weight in Air	0.65 kg [1.4 lbs.]	0.65 kg [1.4 lbs.]	0.56 kg [1.23 lbs.]	0.56 kg [1.23 lbs.]
Weight in Water	0.44 kg [1.0 lbs.]	0.37 kg [0.84 lbs.]	0.34 kg [0.75 lbs.]	0.32 kg [0.71 lbs.]

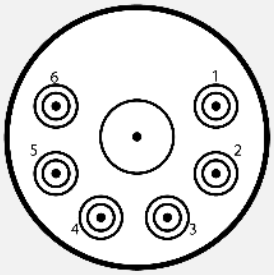
Electrical Specifications				
HDMSC-	**4040/70/85-CX/FX**	**4105/25/50-CX/FX**	**4040/70/85-IP**	**4105/25/50-IP**
Power	10 to 36 VDC		10 to 36 VDC, Power over Ethernet (IEEE802.3af)	
Voltage	3 W Max		2 W Max	
Control	RS-485, RS-232, Tristate (OSD only)		Webpage Operator Interface	
Standard Connector	**Coax**: SubConn HF75CXBH6M Stainless Steel **FleXlink**: SubConn DBH8M, Stainless Steel		**Ethernet:** SubConn DBH8M, Stainless Steel **Power Only:** SubConn BH4M, Stainless Steel	
	Contact Sales for additional options			

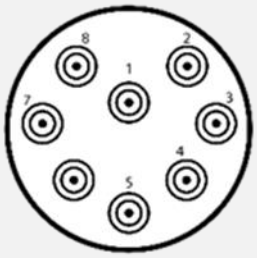
[12] Higher sensitivity mono sensor chroma sensor option only available with IP video format options.

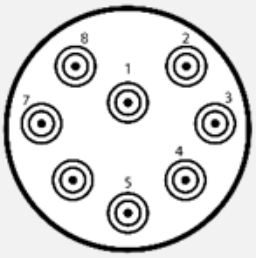
[13] All surfaces in contact with sea water are Titanium. Stainless Steel is used internally as a part of the dome support only.

Standard Pinouts

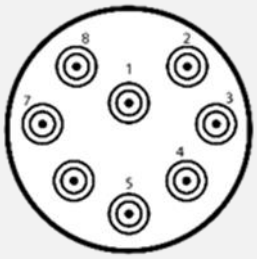
HD-SDI Coax and FleXlink Configurations

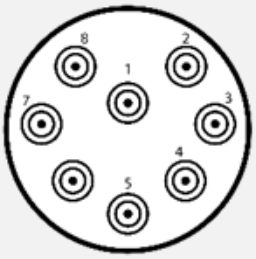
HD Camera – Hybrid Coax Pinout Description			
SUDBH8M/S SubConn HF75CX6BHM  *MALE PIN VIEW*	**PIN**	**Tristate**	**Serial**
	1	DC-	DC-
	2	DC+	DC+
	3	N/C	N/C
	4	N/C	N/C
	5	OSD ↑/↓	↑RxD/B+
	6	OSD →/←	↓TxD/A-
	COAX	SDI	SDI
	SHIELD	SDI REF	SDI REF
	ID	**06X023**	**06X020**

HD Camera – FleXlink Pinout Description (SubConn)			
SUDBH8M/S SubConn DBH8  *MALE PIN VIEW*	**PIN**	**Tristate**	**Serial**
	1	SDI+	SDI+
	2	SDI-	SDI-
	3	N/C	N/C
	4	N/C	N/C
	5	DC+	DC+
	6	DC-	DC-
	7	OSD ↑/↓	↓TxD/A-
	8	OSD →/←	↑RxD/B+
	ID	**08C042**	**08C016**

HD Camera – FleXlink Pinout Description (SEA-CON)		
SEMCBH8M/S SEA-CON MCBH8M-NET  *MALE PIN VIEW*	**FleXlink Tristate**	**FleXlink Serial**
	DC+	DC+
	DC-	DC-
	OSD ↑/↓	↓TxD/A-
	OSD →/←	↑RxD/B+
	SDI+	SDI+
	SDI-	SDI-
	N/C	N/C
	N/C	N/C
	08C020	**08C003**

IP Configurations

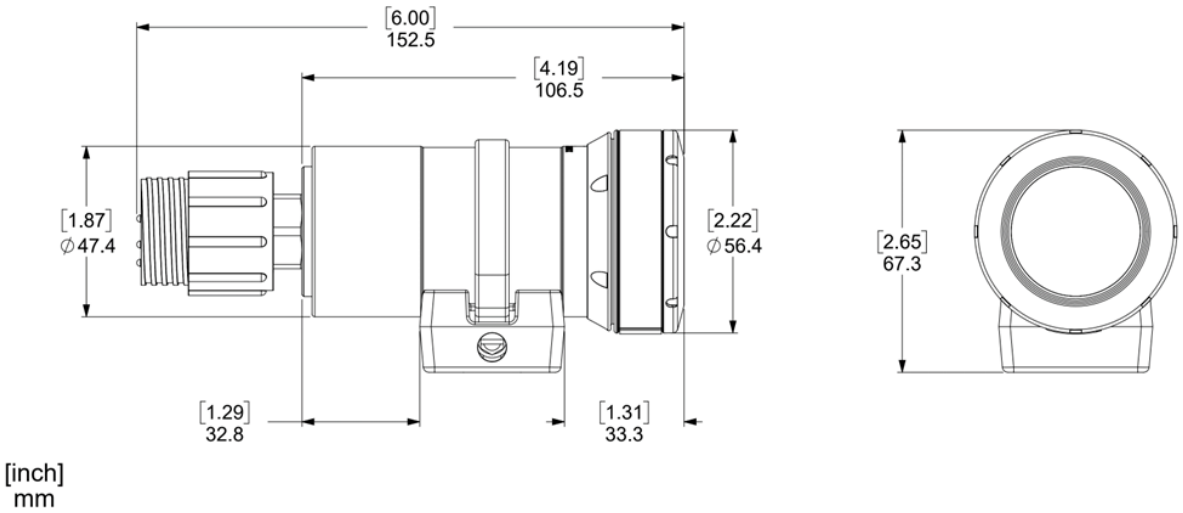
Ethernet Camera – IP Pinout Description (SubConn)			
SUDBH8M/S SubConn DBH8  *MALE PIN VIEW*	**PIN**	**Discrete Power 10/100 Mbps**	**PoE 10/100 Mbps**
	1	DC-	0V PoE
	2	DC-	0V PoE
	3	DC+	48V PoE
	4	DC+	48V PoE
	5	TD-	TD-
	6	TD+	TD+
	7	RD-	RD-
	8	RD+	RD+
	ID	**08E021**	**08E025**

Ethernet Camera – IP Pinout Description (SEA-CON)		
SEMCBH8M/S SEA-CON MCBH8M-NET  *MALE PIN VIEW*	**Discrete Power 10/100 Mbps**	**PoE 10/100 Mbps**
	TD-	TD-
	TD+	TD+
	RD-	RD-
	RD+	RD+
	DC-	0V PoE
	DC-	0V PoE
	DC+	48V PoE
	DC+	48V PoE
	08E022	**08E023**

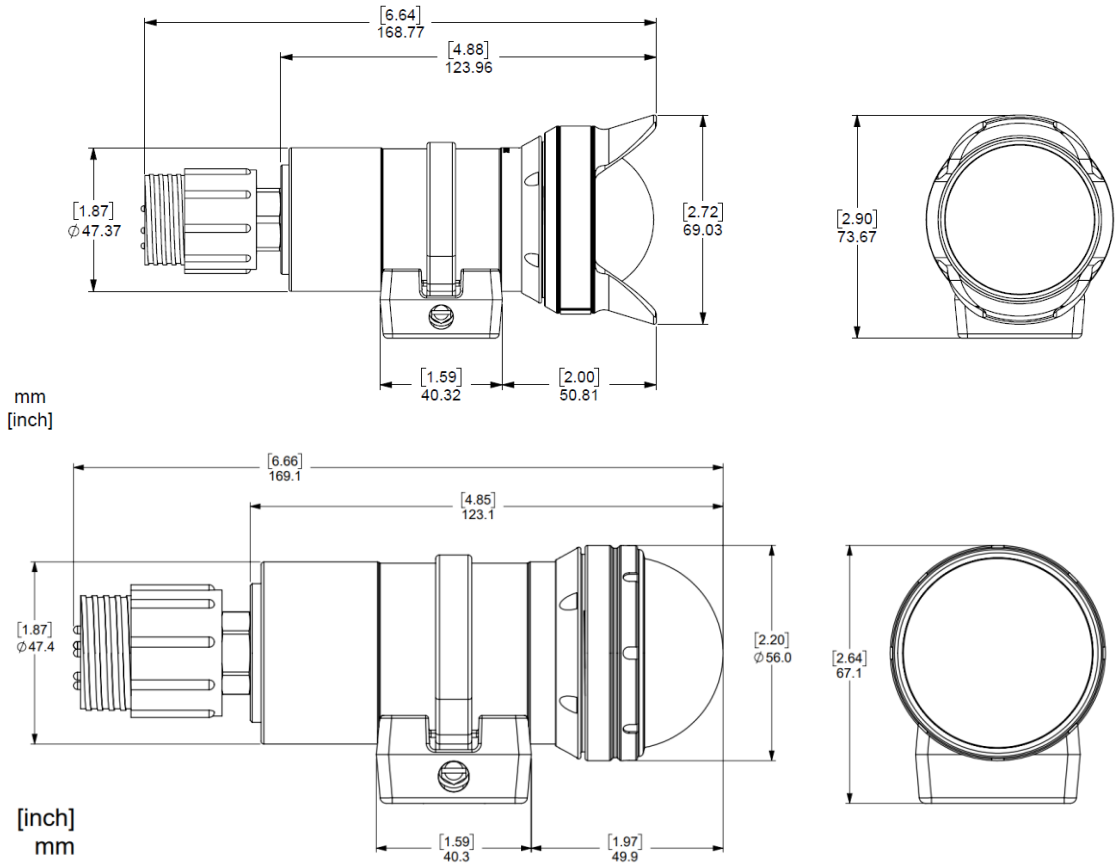
IP Camera – IP Pinout Description		
SRSEANET/S Schilling Robotics SEANET 	**PIN**	**NIM**
	1	DC+
	2	DC-
	3	CHASSIS
	4	RD-
	5	RD+
	6	TD-
	7	TD+
	ID	**07E004**

Dimensions

Sapphire Flat Port



Glass Dome Port With and Without Cowl



HD Zoom SeaCam®

HD 30X OPTICAL ZOOM

1080P/60

FLEXLINK TRANSMISSION

COAX TRANSMISSION

OPTICALLY POLISHED GLASS

UP TO 6 KM DEPTH RATING

30x Optical Zoom Capacity

Ideal for capturing overall scenes, with zoom capability for close-up observation

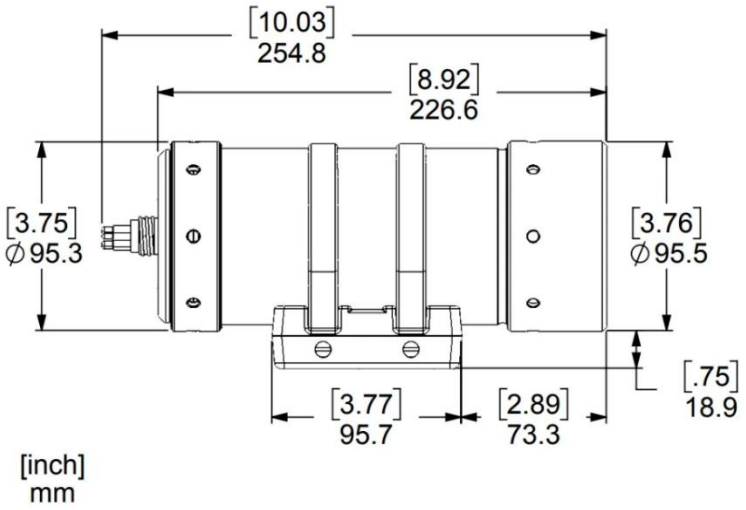
The HD Zoom SeaCam has an impressive 30x optical zoom and superior low light performance with a minimum illumination of 0.024 Lux, while providing high quality HD video at up to 60 frames per second. This camera is available with both Coax and our FleXlink video interface, and comes in either a 6,000 m rated Titanium housing or a lightweight 2000 m rated Aluminum variant.

Specifications subject to change without notice

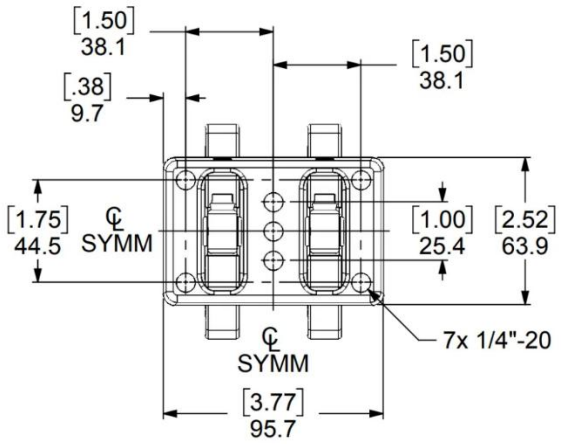
Specifications

HDZSC-	3045
Optical Specifications	
Lens	4.3 mm ~ 129 mm, F/1.6 to F/4.7
Focus	Wide: 10 mm ~ infinity Telephoto: 1200 mm ~ infinity
FOV in Water	Wide: 47° H x 27° V x 53° D Telephoto: 1.7° H x 1° V x 2° D
Video Specifications	
Image Sensor	1/2.8 in. 2.1MP CMOS
Sensor Resolution	1920 H x 1080 V
Measured Resolution	850 TVL
Faceplate Illumination	0.024 Lux (50IRE
Signal to Noise	< 50 dB
Video Output	HD-SDI 1.5Gb/s 1080p/60, 1080p/59.94, 1080p/50, 1080p/30, 1080p/29.97, 1080p/25, 1080i/60, 1080i/59.94, 1080i/50, 720p/60, 720p/59.94, 720p/50, 720p/30, 720p/29.97, 720p/25
Serial Protocol	VISCA
Environmental Specifications	
Depth Rating	Titanium: 6,000 m Aluminum: 2,000 m
Operating Temp	-5° C to 60° C [23° F to 140° F]
Storage Temp	-20° C to 60° C [-4° F to 140° F]
Mechanical Specifications	
Housing	6061 Aluminum 6Al-4V Titanium
Port	Optically polished glass
Weight in Air	Al: 2.18 kg [4.80 lbs] Ti: 2.73 kg [6.02 lbs]
Weight in Water	Al: 0.62 kg [1.37 lbs] Ti: 1.16 kg [2.56 lbs]
Electrical Specifications	
Voltage	10~36 VDC
Power	9 W Max
Standard Connector FleXlink	SUDBH8M/S SubConn
Standard Connector Coax	SUHF75CXBH6M/S SubConn

Dimensions



Bracket



DEEPSEA

Vertex SeaCam®

- FULL HD RESOLUTION
- 79° HORIZONTAL FIELD OF VIEW
- CUSTOM CORRECTOR OPTICS
- 10X OPTICAL ZOOM
- TRISTATE ZOOM & FOCUS
- UP TO 11 KM DEPTH RATING

Dynamic Controls with Up To 10x Image Zoom

Superior imaging performance with proprietary corrector optics

The compact Vertex SeaCam includes full HD resolution with 10x optical zoom and low-distortion 79° HFOV at full-wide. A minimum faceplate illumination of 0.5 lux provides impressive low light capability.

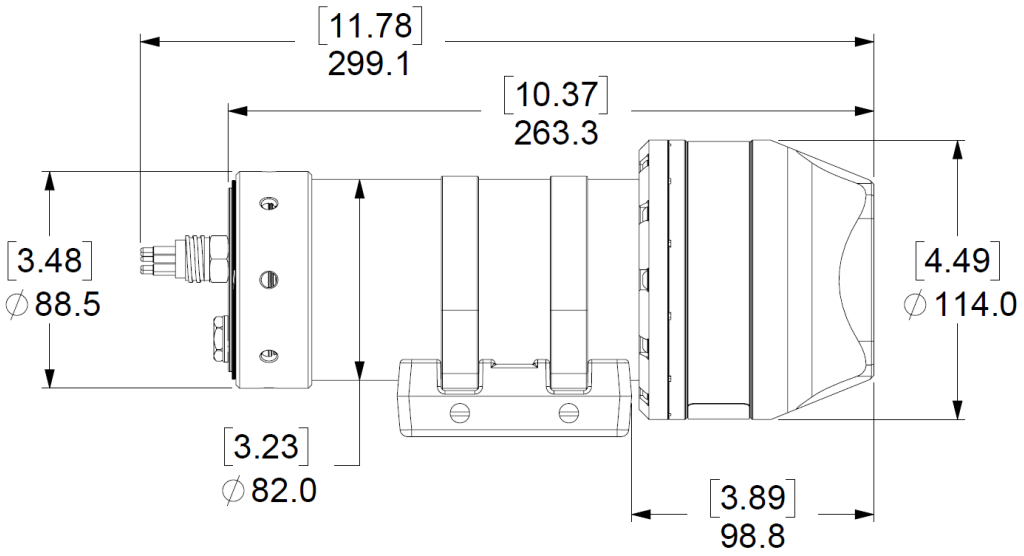
This subsea camera works with RS-232 and RS-485 control interfaces through VISCA or SeaSense Protocol. Tristate control is available for zoom, focus, and auto focus features. The Vertex SeaCam is easy to integrate with fiber, coax, and FleXlink output method options. Configuration options include aluminum housing with 6,000 m depth rating and titanium housing with 11,000 m depth rating. The Vertex SeaCam includes a mounting bracket with titanium inserts.

Specifications subject to change without notice

Specifications

Vertex SeaCam – VSC-1080	
Optical Specifications	
Lens	3.2 mm to 32 mm F/1.8 to F/3.4
Optical Zoom	10x
Focus	Wide: 10 mm Tele: 250 mm
FOV in Water	Wide: 86° D x 79° H x 49° V Tele: 10.6° D x 9.2° H x 5.3° V
Video Specifications	
Image Sensor	1/3” 4.08MP CMOS Progressive Scan
Faceplate Illumination	0.51 Lux
Scene Illumination	0.65 Lux
Resolution	1920x1080
Measured Resolution	850 TVL at Full Wide
Signal to Noise	< 50 dB
Video Output	**HD-SDI 1.485 Gb/s:** 1080p/30, 1080p/29.97, 1080p/25, 1080i/60, 1080i/59.94, 1080i/50, 720p/60, 720p/59.94, 720p/50, 720p/30, 720p/29.94, 720p/25 **3G-SDI 2.97 Gb/s:** 1080p/60, 1080p/59.94, 1080p/50 **CVBS:** NTSC,PAL
Serial Protocol	SeaSense™ Serial Protocol, VISCA
Control Interface	RS-232, RS-485, Tristate (zoom, focus, auto focus)
Environmental Specifications	
Depth Rating	Aluminum: 6,000 m Titanium: 11,000 m
Operating Temp	-5 °C to 40 °C [23 °F to 104 °F]
Storage Temp	-20 °C to 60 °C [-4 °F to 140 °F]
Mechanical Specifications	
Housing	6000 Series Aluminum 6Al-4V Titanium
Port	Optical glass dome
Weight in Air	Aluminum: 3.84 kg [8.47 lbs]
Weight in Water	Aluminum: 1.81 kg [3.99 lbs]
Electrical Specifications	
Voltage	10~36 VDC
Power	Fiber Optic: 10 W Max FlexLink and Coax: 7 W Max
Connectors	
Fiber	Electric: SEACON MCBH6 Fiber Optic: SEACON MINF-1FO
Coax	SubConn HF75DXBH6M
FleXlink	SubConn DBH8MP

Dimensions



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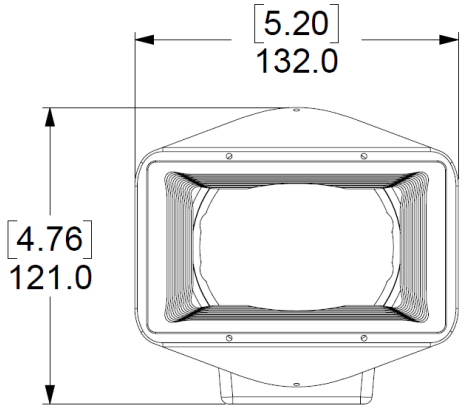


Nano SeaCam®

620 TVL RESOLUTION

ULTRA COMPACT CAMERA

CUSTOM CORRECTOR OPTICS

NTSC & PAL ANALOG OUTPUTS

OPTICALLY POLISHED GLASS

UP TO 11 KM DEPTH RATING

Ultra-Compact Size for Easy Integration

Lightweight and ideal for confined, small spaces

The Nano SeaCam is our compact, high resolution analog camera at 620 TVL. Divers and inspection class ROVs use this subsea camera for its size and weight.

The Nano SeaCam features titanium housing and a sapphire port. An optional 11,000 m depth rating is available.

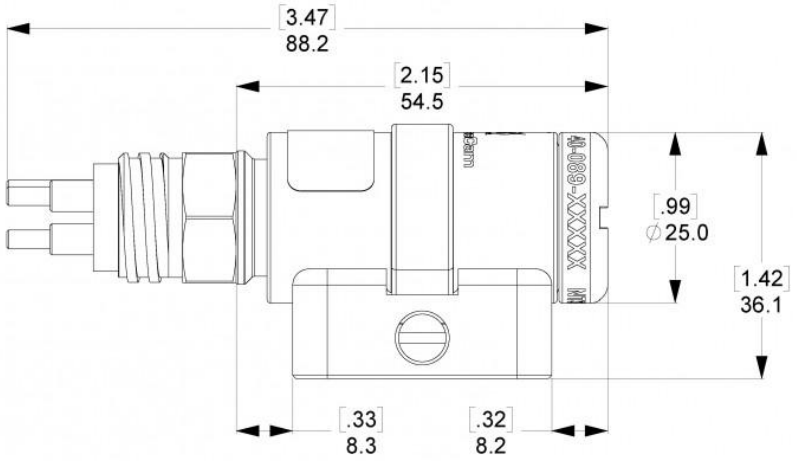
Specifications subject to change without notice

Specifications

	NSC-T
Optical Specifications	
Lens	2.54 mm, F/3.5
Focus	Fixed
Near Focus	100 mm
Depth of Field	75 mm [3.0 in] to infinity
FOV in Air	80° H x 60° V x 102° D
FOV in Water	Wide: 59° H x 44° V x 72° D
Video Specifications	
Image Sensor	1/3 inch SONY color CCD II 410K
Sensor Resolution	NTSC: 768 H x 494 V PAL: 752 H x 528 V
Measured Resolution	600 TVL
Faceplate Illumination	0.04 Lux
Signal to Noise	> 50 dB
Video Output	Composite 1.0Vp-p 75ohm unbalanced
Video Format	NTSC or PAL
Environmental Specifications	
Depth Rating	6,000 m standard 11,000 m optional
Operating Temp	-10° C to 50° C [14° F to 122° F]
Storage Temp	-30° C to 70° C [-22° F to 158° F]
Mechanical Specifications	
Housing	6Al-4V Titanium
Port	Optically polished sapphire
Weight in Air	130 g [4.6 oz] : 6,000 m depth rating 170 g [6.0 oz] : 11,000 m depth rating
Weight in Water	90 g [3.2 oz] : 6,000 m depth rating 100 g [3.5 oz] : 11,000 m depth rating
Electrical Specifications	
Voltage	7~32 VDC
Power	2 W Max
Connector	
Standard Connector	SubConn MCBHM4/SS *Contact Sales for more options*

Dimensions

6,000 m Depth Rating



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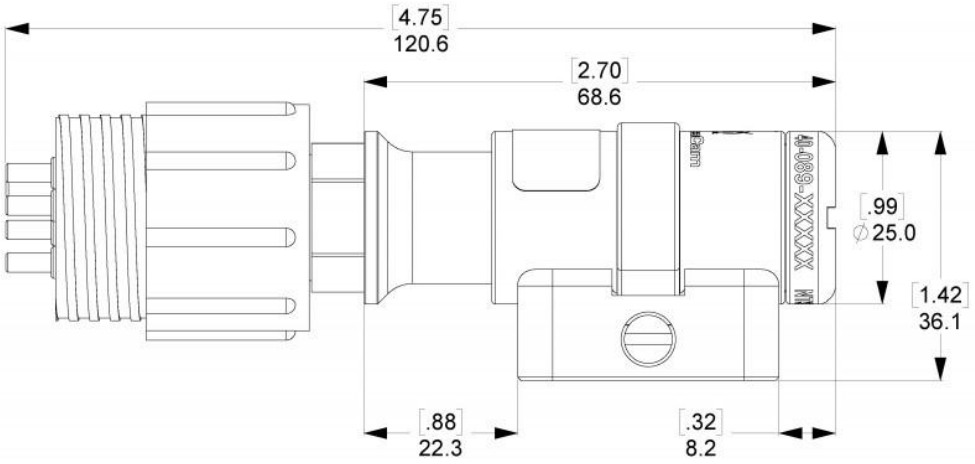
11,000 m Depth Rating



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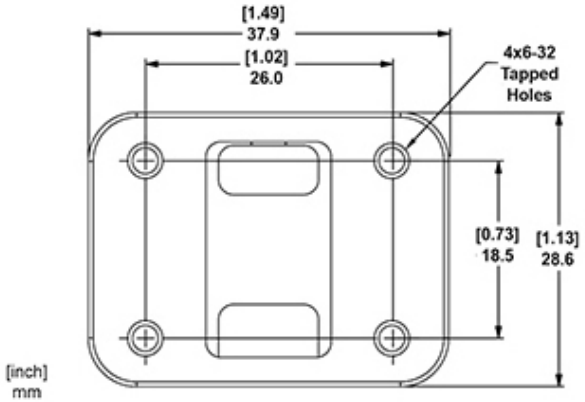

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Super Wide-i SeaCam®

EXTREME WIDE ANGLE

VIGNETTING FREE

COMPOSITE ANALOG OUTPUT

OPTICALLY POLISHED GLASS

WIDE HORIZONTAL 150° FOV

UP TO 11 KM DEPTH RATING

The Widest Image of Any DeepSea Camera

An impressive 150° HFOV in water

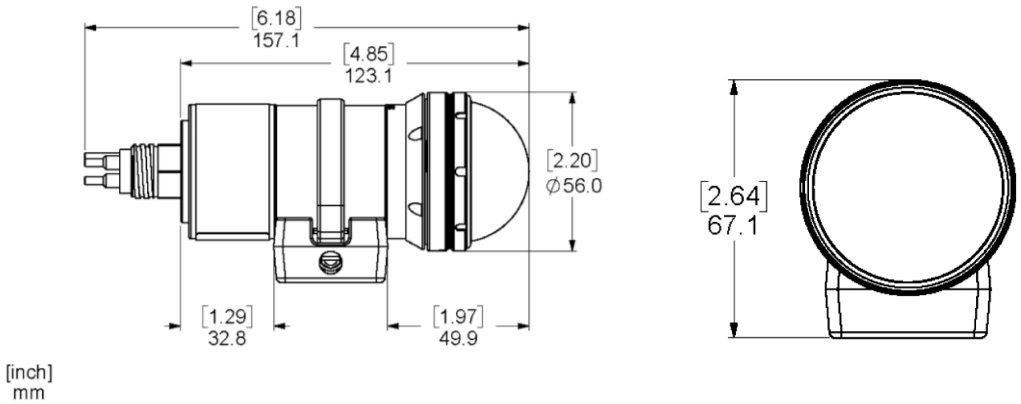
The Super Wide-i SeaCam has the widest image of any DeepSea camera product, with a 150° horizontal field of view without vignetting. Active distortion correction reduces pinching along the edges of the image to provide consistent angular resolution across more of the field of view. Combined with a high resolution 1000 TVL sensor, nothing sees more than the Super Wide-i SeaCam.

Specifications subject to change without notice

Specifications

SWSC-	4070	3070
Optical Specifications		
Lens	1.4 mm, F/2.2	
Focus	Fixed	
FOV in Water	150° H x 120° V x 185° D	
Video Specifications		
Image Sensor	1/3.2” 1.3 MP CMOS Rolling Shutter	
Sensor Resolution	600 TVL	
Faceplate Illumination	0.5 Lux F/2.2	
Signal to Noise	50 dB	
Video Output	Composite, 1.0 Vp-p 75 ohm, unbalanced	
Video Format	NTSC/PAL Color	NTSC/PAL B&W
Environmental Specifications		
Depth Rating	6,000 m 11,000 m optional	
Operating Temp	-10 °C to 40 °C [-14 °F to 104 °F]	
Storage Temp	-30 °C to 70 °C [-22 °F to 158 °F]	
Mechanical Specifications		
Housing	Titanium	
Port	Glass dome port	
Weight in Air	0.49 kg [1.07 lbs.]	
Weight in Water	0.26 kg [0.57 lbs.]	
Electrical Specifications		
Voltage	10~36 VDC	
Power	0.93 W Max	
Standard Connector	SUBH4MS SubConn BH4MP 4-Pin Male Stainless Steel *Contact Sales for more options*	

Dimensions



DEEPSEA

Wide-i SeaCam®

TITANIUM HOUSING

AUTOMATIC BACKLIGHT

COMPOSITE VIDEO OUTPUT

OPTICALLY POLISHED GLASS

WIDE HORIZONTAL 125° FOV

6 KM DEPTH RATING

Perfect for Day-to-Day Underwater Applications

Immersive viewing experience and FOV for improved situational awareness

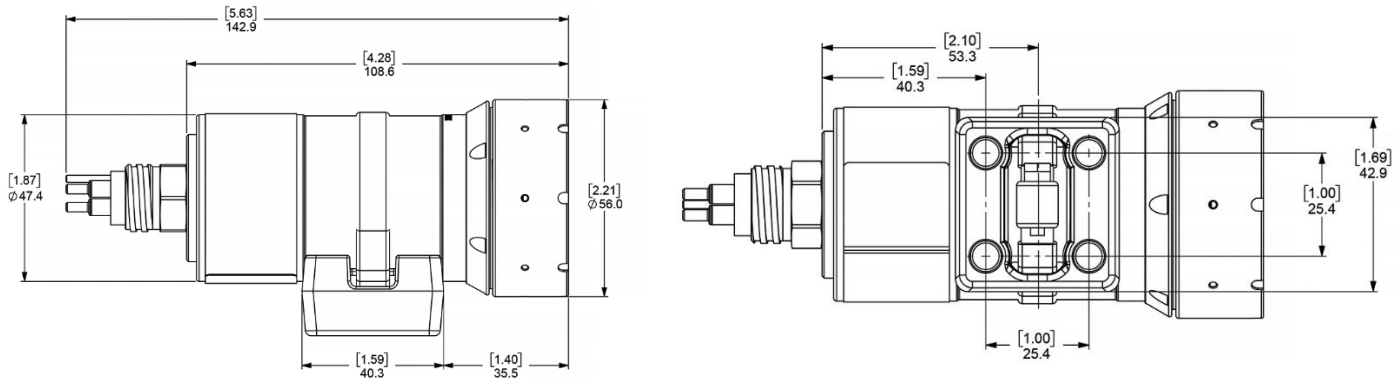
The Wide-i SeaCam features a unique wide angle flat port optical design that can be flush mounted and reduce snag points. With a 125° horizontal field of view, this fish-eye camera gives operators an immersive view of the surroundings. The WSC-4070 and WSC-3070 models feature a rugged titanium housing with a 6 km depth rating and corrosion resistance suitable for long-term deployment. New real-time distortion correction reduces the fish-eye vignetting and barrel distortion compared to previous models.

Specifications subject to change without notice

Specifications

WSC-	4070	3070
Optical Specifications		
Lens	1.96 mm F/1.8 with IR filter	
Focus	Fixed	
FOV in Water	125° Horizontal	
Video Specifications		
Image Sensor	1/3.2” 1.27MP CMOS	
Sensor Resolution	NTSC: 1280 x 486 PAL: 1211 x 576	
Scene Illumination	1.7 Lux	
Signal to Noise	50 dB	
Video Output	Composite, 1.0 Vp-p 75 ohm, unbalanced	
Video Format	NTSC/PAL Color	NTSC/PAL B&W
Environmental Specifications		
Depth Rating	6,000 m	
Operating Temp	-10 °C to 40 °C [-14 °F to 104 °F]	
Storage Temp	-30 °C to 70 °C [-22 °F to 158 °F]	
Mechanical Specifications		
Housing	Titanium	
Port	Glass flat port	
Weight in Air	490 g [1.1 lbs.]	
Weight in Water	Water: 250 g [0.55 lbs.]	
Electrical Specifications		
Voltage	10~36 VDC	
Power	1.8 W Max	
Standard Connector	SubConn MCBH 4-Pin Male Stainless Steel	

Dimensions



DEEPSEA

Multi SeaCam®

HOUSING MATERIAL OPTIONS

STANDARD CONNECTOR

NTSC & PAL ANALOG OUTPUTS

SCRATCH-RESISTANT SAPPHIRE PORT

UP TO 6 KM DEPTH RATING

COLOR OPTIONS

Reliability with a Range of Configurations

Dependable imaging with minimal infrastructure

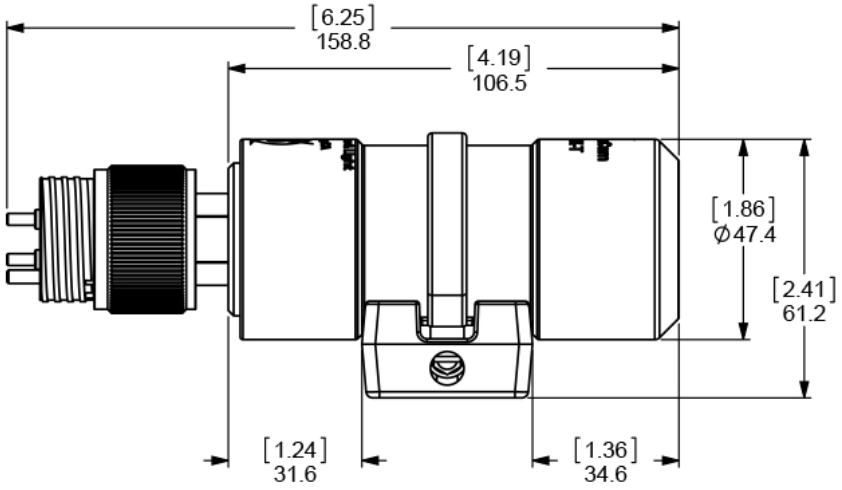
The reliable Multi SeaCam is an analog camera for subsea operations with a range of configuration options. This camera features a sapphire port and standard titanium housing with a 6,000 m depth rating. The Multi SeaCam includes a mounting bracket with titanium inserts. The LED Multi SeaCam® offers similar capabilities with integrated LED lights.

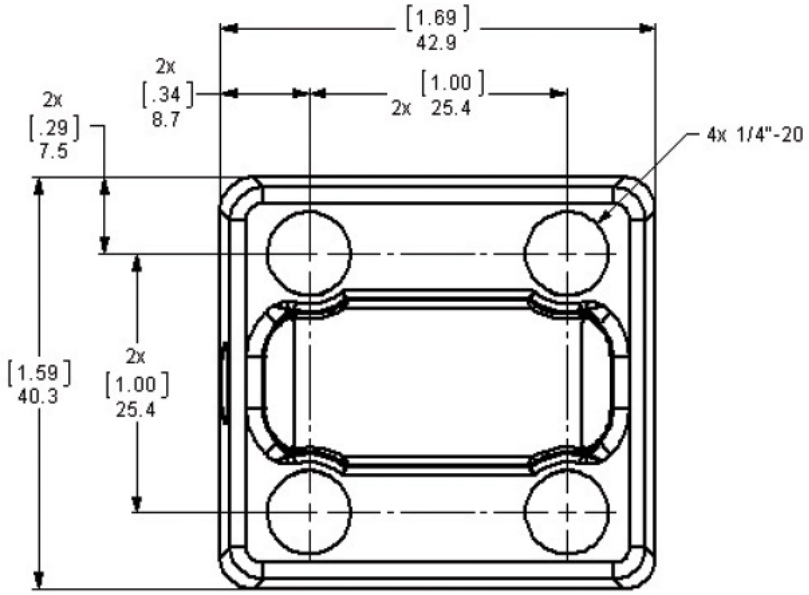
Specifications subject to change without notice

Specifications

MSC-	1070	2070
Optical Specifications		
Lens	3.0 mm, f/2.0	
Focus	Fixed	
Depth of Field	10 cm [4 in.] to infinity	
FOV in Air	86º H x 63º V x 95º D	
FOV in Water	64º H x 45.5º V x 74º D	
Video Specifications		
Image Sensor	1/3.2” CMOS image sensor	
Number of Pixels	1280 H x 486 V (NTSC) 1211 H x 576 V (PAL)	
Sensor Resolution	600 TV+ lines horizontal	600 TV lines horizontal
Scene Illumination	0.59 Lux at f/2.0	
Signal to Noise	50 dB	
Video Output	1.0 volt peak-to-peak into 75 ohm	
Video Format	NTSC/PAL B&W	NTSC/PAL Color
Environmental Specifications		
Depth Rating	Delrin: 300 m Titanium: 6,000 m	
Operating Temp	-20 °C to 40 °C [-4 °F to 104 °F]	
Storage Temp	-30 °C to 70 °C [-22 °F to 158 °F]	
Mechanical Specifications		
Housing	Delrin or Titanium	
Port	Sapphire	
Weight in Air	Delrin: 296 g [10.5 oz.] Titanium: 459 g [16 oz.]	
Weight in Water	Delrin: 56 g [2 oz.] Titanium: 112 g [4 oz.]	
Electrical Specifications		
Voltage	10~36 VDC	
Power	0.93 W Max	
Accessory		
UV Cutout Filter	UV cutout filter for use with UV LED SeaLite (may reduce Field of View)	
Connectors		
Standard Connector	SubConn MCBH4M *Contact Sales for more options*	SubConn BH4MP *Contact Sales for more options*

Dimensions





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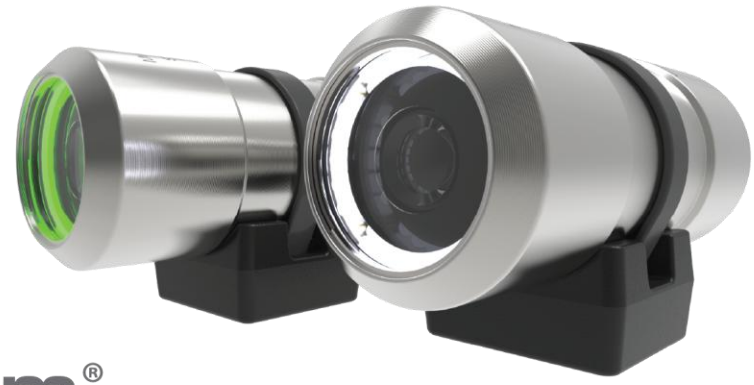


LED Multi SeaCam®

DIMMING CAPABILITIES

COLOR OPTIONS

STANDARD CONNECTOR

NTSC & PAL ANALOG OUTPUTS

SCRATCH-RESISTANT SAPPHIRE PORT

4 KM DEPTH RATING

Versatile Camera with Built-In LEDs

Perfect for any ROV/AUV in inspection, observation and work-class vehicles

The LED Multi SeaCam has LED lights integrated into the housing. This self-lit camera is ideal for applications that require light within a limited space. Features include a sapphire port, dimming capabilities, and a titanium housing with a 4,000 m depth rating.

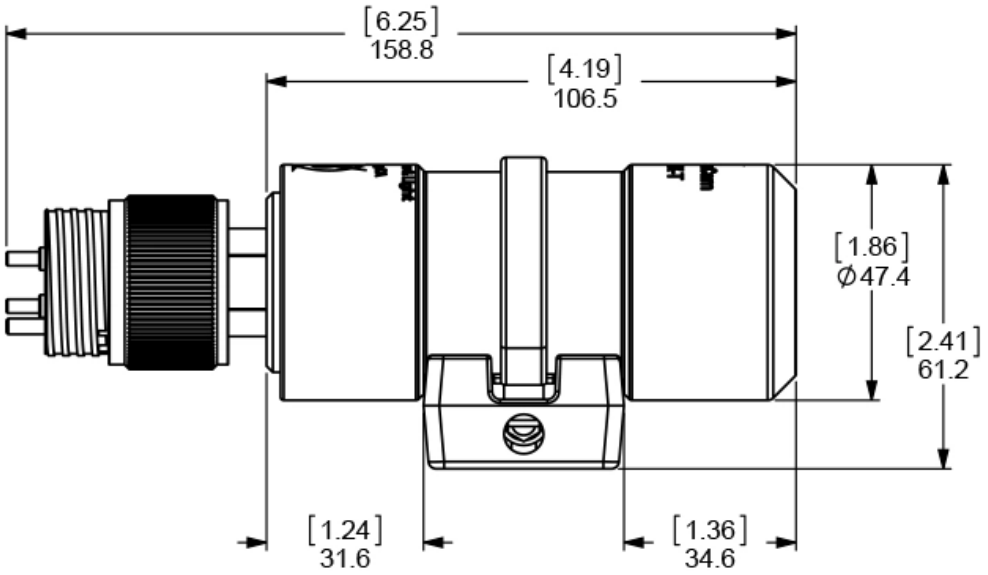
The LED Multi SeaCam includes a mounting bracket with titanium inserts. The Multi SeaCam offers similar capabilities without integrated LEDs.

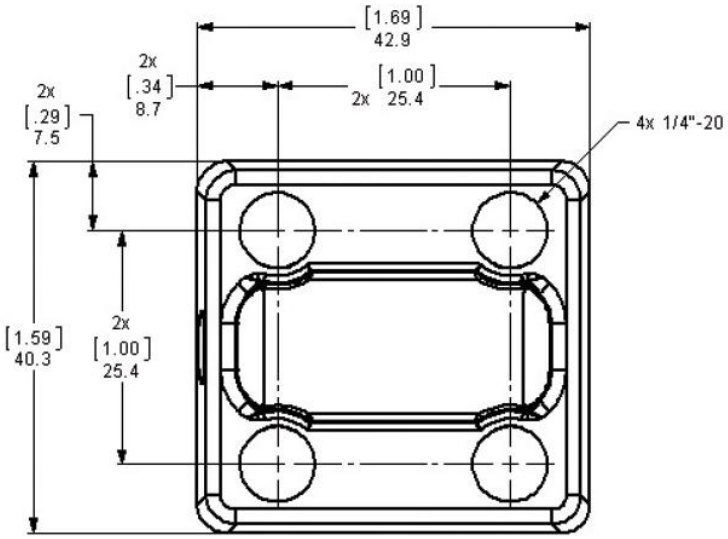
Specifications subject to change without notice

Specifications

MSC-	1075	2075
Optical Specifications		
Lens	3.0 mm, f/2.0	
Focus	Fixed	
Depth of Field	10 cm [4 in.] to infinity	
FOV in Air	86º H x 63º V x 95º D	
FOV in Water	64º H x 45.5º V x 74º D	
Video Specifications		
Image Sensor	1/3.2 inch CMOS image sensor	
Number of Pixels	1280 H x 486 V (NTSC) 1211 H x 576 V (PAL)	
Sensor Resolution	600 TV lines horizontal	
Scene Illumination	0.59 Lux at f/2.0	
Signal to Noise	50 dB	
Video Output	1.0 volt peak-to-peak into 75 ohm	
Video Format	NTSC/PAL B&W	NTSC/PAL Color
Environmental Specifications		
Depth Rating	4,000 m	
Operating Temp	-20 °C to 40 °C [-4 °F to 104 °F]	
Storage Temp	-30 °C to 70 °C [-22 °F to 158 °F]	
Mechanical Specifications		
Housing	Titanium	
Port	Sapphire	
Weight in Air	459 g [16 oz.]	
Weight in Water	112 g [4 oz.]	
Electrical Specifications		
Voltage	10~36 VDC	
Power	Camera: 0.93 W Max LED: 0 to 3.1 W Total: 3.2 W Max	
LED Color Ring	Green	White
Standard Connector	SubConn MCBH4M/SS *Contact Sales for more options*	

Dimensions





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SeaVent® Pressure Relief Valves

SeaVent Pressure Relief Valves provide a reliable safeguard for sealed subsea enclosures, helping prevent damage caused by internal pressure buildup. Whether from battery off-gassing, thermal expansion, or trapped air during deployment, unmanaged pressure differentials can compromise housing integrity. SeaVent valves are engineered to automatically relieve excess internal pressure while maintaining environmental protection.

Product Range

- **Double Dual Seal (DDS):** Dual O-ring redundancy for maximum protection against leaks. Available in PEEK or Titanium.
- **Single Dual Seal (SDS):** Available in Aluminum, Stainless, or Titanium with adjustable cracking pressures (5–25 psi).
- **Single Seal SAE (SSS):** A compact, cost-effective 316 Stainless Steel valve for standardized SAE ports.

The DeepSea PRV Advantage

Full Ocean Rating

Our PRVs are rated up to 11,000m, ensuring they won't fail or leak under the crushing pressures of the Hadal zone.

Integrated Vacuum Support

Unique attachments allow for vacuum-testing your entire enclosure through the PRV before deployment, ensuring seal integrity.

Compact, Integration-Ready Design

SeaVent PRVs feature a small footprint and straightforward mounting interface, allowing easy integration into new or existing housings

DEEPSEA

SeaVent® Pressure Relief Valves

ADJUSTABLE CRACKING PRESSURE

MATERIAL OPTIONS

UP TO 11,000 M DEPTH RATING

Pressure Relief Valves to Meet All Your Subsea Vehicle Needs

SeaVent valves are designed to prevent catastrophic explosions of subsea housings caused by internal pressure buildup (battery off-gassing or thermal expansion) by automatically venting internal pressure once it exceeds a set cracking pressure.

Double Dual Seal

SeaVent Double Dual Seal (DDS) uses dual O-rings for redundant protection against leaks. Hexagonal sides at the base of the DDS allow for easy installation with a standard wrench. The DDS is offered in either PEEK or titanium with a cracking pressure of 10 psi. A vacuum and fill attachment is available.

Single Dual Seal

The Single Dual Seal (SDS) can be specified with a cracking pressure range of 5-15 or15-25 psi. Materials include aluminum, stainless steel, or titanium. A vacuum attachment is available.

Single Seal SAE

Our Single Seal SAE (SSS) is available in 316 stainless steel with a cracking pressure range set from 5-15 or 15-25 psi. There is no vacuum fill option for this configuration.

Specifications subject to change without notice

For further information, email
sales@deepsea.com

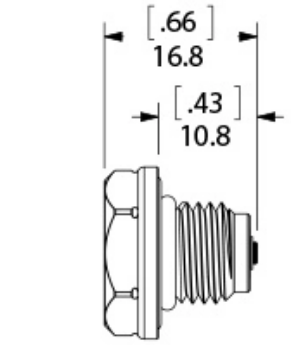
DEEPSEA.COM

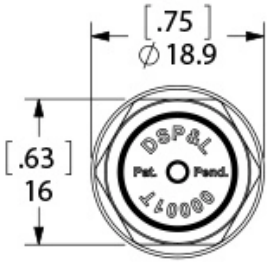
Specifications

	Double Dual Seal (DDS)	Single Dual Seal (SDS)	Single Seal SAE (SSS)
Optical Specifications			
Depth	Titanium: 11,000 m PEEK: 6,000 m	Titanium: 11,000 m Aluminum and Stainless Steel: 6,000 m	Stainless Steel: 6,000 m
Operating Temperature	0 °C to 40 °C [32 °F to 104 °F]		
Storage Temperature	10 °C to 30 °C [50 °F to 86 °F]		
Default Cracking Pressure	10 psi +/- 20%		25 psi +/- 20%
Cracking Pressure Range	5 to 10 psi	5 to 15 psi (Optional 15 to 25 psi)	15 to 25 psi (Optional 5 to 15 psi)
Materials	Titanium 6Al-4V PEEK	Titanium 6Al-4V Aluminum-6061 Stainless Steel 316 (Passivated)	Stainless Steel 316 (Passivated)
Weight in Air	Titanium: 8.30 g [0.29 oz]	Titanium: 14.10 g [0.49 oz]	12.90 g [0.46 oz]
Threads	7/16 – 20 with #4 J1926 Port		

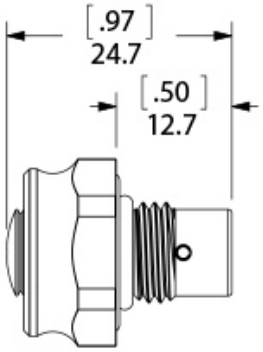
Dimensions

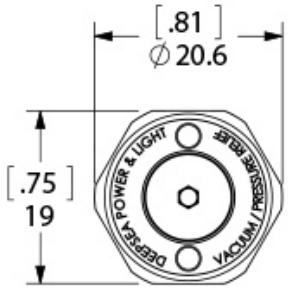
Double Dual Seal



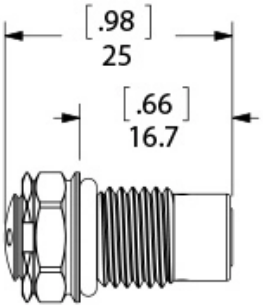


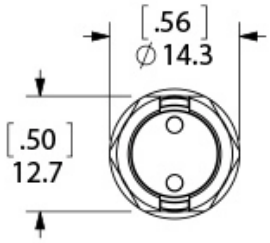
Single Dual Seal

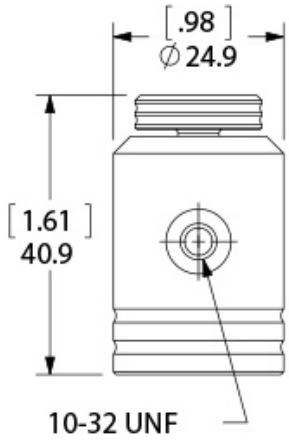


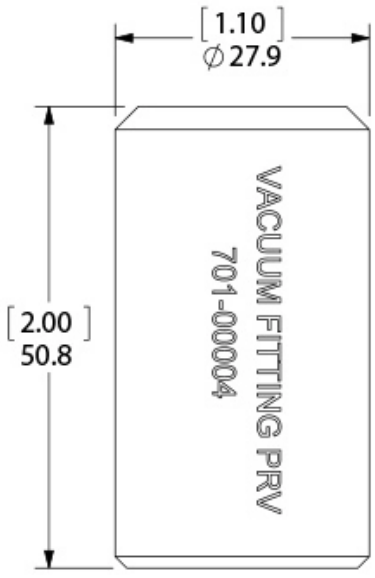


Single Seal SAE









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DEEPSEA

SmartHub™

UP TO 6 KM DEPTH RATING

PER CHANNEL CONTROL

ALL-IN-ONE INTEGRATION

ADVANCED DIAGNOSTICS

PROTOCOL AGNOSTIC

The All-in-One Control Hub for Deep-Sea Vehicles

System-level control—without the system-level complexity

The SmartHub is a centralized subsea lighting power and control solution designed for ROVs, AUVs, and other subsea systems requiring high-performance, reliable illumination. It regulates and distributes power from 24–110/220 VAC or VDC sources while providing independent control, dimming, sequencing, monitoring, and fault protection for each connected light.

Supporting analog and digital control (including RS-485, Ethernet, and user-specified protocols), the SmartHub OktoPod is fully protocol-agnostic, enabling seamless integration with existing vehicle architectures and lighting from multiple manufacturers. Advanced diagnostics—including current, voltage, leakage, thermal, and fault monitoring—are streamed topside in real time to improve troubleshooting, reduce downtime, and protect mission-critical equipment. Depth-rated to 6,000 m, the LCU-HUB replaces multiple discrete controllers with a single robust unit, reducing complexity, risk, and maintenance effort while improving overall system performance.

Specifications subject to change without notice

For further information, email
sales@deepsea.com

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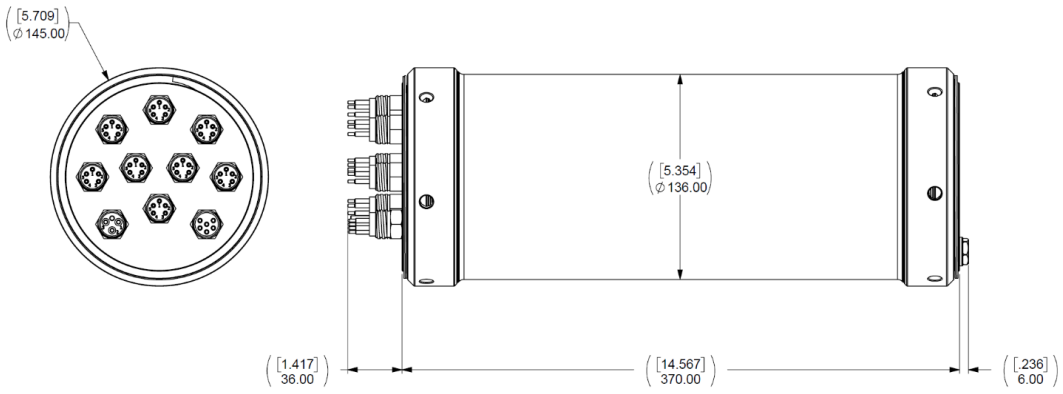
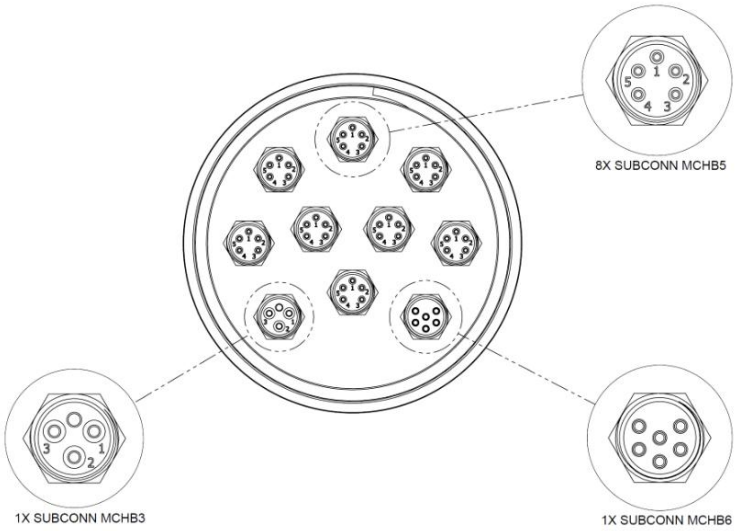
SmartHub	
Environmental Specifications	
Depth Rating	6,000 m (19,685 ft.)
Test Pressure	70.3 MPa [10,200 PSI]
Max Pressure	103.4 MPa [15,000 PSI]
Operating Temp	-40°C to 35°C [-40°F to 95°F]
Storage Temp	-40°C to 80°C [-40°F to 176°F]
Mechanical Specifications	
Housing Material	6Al4V Titanium
Dimensions (L x D)	370mm x 145mm [14.6 in. x 5.7 in.]
Displacement	1,849.5 cm^3 [112.9 in^3]
Weight in Air	8.0 kg [17.64 lbs.]
Weight in Water	2.5 kg equivalent mass [5.5 lbs.]
Mounting	N/A
Electrical Specifications	
Input Voltage Range	100 to 240 VAC, 47 to 63 Hz 120 to 360 VDC
Maximum Power Draw	12.6 A @ 100 VAC
Inrush Current	90 A @ 240 VAC
Power Factor	0.98 (typ.)
Output Voltage	48 VDC
Load Regulation	±0.5% (10% to full load)
Line Regulation	±0.3% (240 VAC to 100 VAC)
Isolation - Input to Output	4250 VAC MAX 100 M-ohm MIN
Isolation - Input to CHASSIS	2000 VAC MAX
Isolation - Output to CHASSIS	2000 VAC MAX
Control Interface Specifications	
Power Control Channels	8x @ 120 W MAX each
Control Interface	RS-232, RS-485, or Ethernet
Supported Baud Rates	9600, 19200, 38400, 57600, 115200
Isolation	2000 VAC
Protocol Support	SeaSense for SmartHub Administration *Ethernet endpoints are protocol agnostic*
Host Ethernet Configuration	10/100-BaseT, 1000-BaseT, TCP, UDP
Channel Over Current Threshold	2.5 A @ 48 VDC
Ground Fault Warning Threshold	5mA
Ground Fault Trigger Treshold	30mA

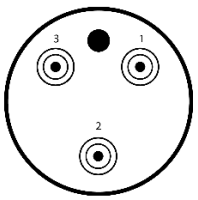
Dimensions

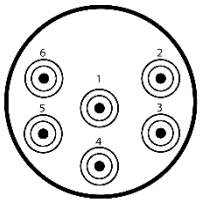


Connectors/Pinout

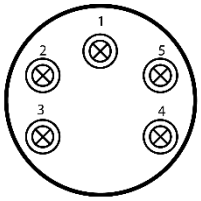


Pinouts

Input Power Connector				
Connector	**Manufacturer**	**SubConn**	**Pinout (03P002)**	
 *Male Pin View*	Model	MCBH3M-SS	**1**	LINE/DC+
	Pressure Rating	20,300 PSI (mated) 11,600 PSI (open face)	**2**	NEUT/DC-
	Voltage Rating	300V DC/AC rms	**3**	CHASSIS
	Current Rating	10A/ contact 20A/connector		

6-Pin Host Control Interface Connector					
Connector	**Manufacturer**	**SubConn**	**Pinout**	**Serial**	**Ethernet**
 *Male Pin View*	Model	MCBH6M-SS	**1**	SERIAL REF (GND)	TD+
	Pressure Rating	20,300 PSI (mated) 11,600 PSI (open face)	**2**	N/C	TD-
	Voltage Rating	300V DC/AC rms	**3**	N/C	RD+
	Current Rating	5A/ contact 20A/connector	**4**	N/C	N/C
			5	↑RxD/B+	N/C
			6	↓TxD/A-	RD-

8-Pin Host Control Interface Connector						
Connector	**Manufacturer**	**SubConn**	**Pinout**	**Serial**	**Serial+ Ethernet**	**Gigabit Ethernet**
Male Pin View	Model	MCBH8M-SS	**1**			
	Pressure Rating	20,300 PSI (mated) 11,600 PSI (open face)	**2**			
	Voltage Rating	300V DC/AC rms	**3**			
	Current Rating	5A/ contact 20A/connector	**4**			
			5			
			6			
			7			
			8			

Input Power Connector				
Connector	**Manufacturer**	**SubConn**	**Pinout (05L004)**	
 *Female Socket View*	Model	MCBH5F-SS	**1**	+48V DC
	Pressure Rating	20,300 PSI (mated)	**2**	0V DC (GND)
	Voltage Rating	300V DC/AC rms	**3**	CHASSIS
	Current Rating	5A/ contact 20A/connector	**4**	↑RxD/B+
			5	↓TxD/A-

Power Modules

For more than 30 years, the subsea community has relied on the SeaBattery® Power Module to deliver dependable power in the world's most demanding underwater environments. Designed for durability and operational simplicity, SeaBattery modules feature a pressure-compensated architecture rated to depths of 11,000 meters, eliminating the need for heavy pressure vessels while ensuring consistent performance at full ocean depth.

At a Glance

- **Configurations:** 6 V, 12 V, 24 V, and 48 V options
- **Depth Rating:** 11,000 m – Full Ocean Depth
- **Chemistry:** Lead-acid gel-cell with Absorbent Glass Mat (AGM) technology.

The SeaBattery Advantage

Pressure Compensation	Environmentally Rugged	Maintenance-Free Design
Housed in a molded polyethylene box filled with inert mineral oil and a urethane diaphragm, our batteries operate flawlessly at any depth without a heavy pressure vessel.	Unlike lithium-ion, our AGM technology does not expand in cold temperatures, making it safer and more stable for 2–4°C bottom water conditions and has no shipping restrictions	Sealed AGM cells require no routine maintenance, while the transparent urethane diaphragm allows visual inspection of batteries and internal wiring without disassembly.
		

DEEPSEA

SeaBattery®

PRESSURE COMPENSATED DESIGN

MULTIPLE CONFIGURATIONS

UP TO 11 KM DEPTH RATING

A Reliable Subsea Pressure-Compensated Submersible Battery

The subsea community has relied on our SeaBattery Power Module for over 30 years. The durable design works in the most demanding subsea applications. This battery has a pressure compensated design and an 11,000 m depth rating. 12V, 24V, and 48V configurations are available.

SeaBattery Power Modules use Absorbent Glass Mat (AGM) lead-acid cells which add vibration and shock resistance. These Power Modules continue to work when inverted. The SeaBattery Power Modules do not have the same shipping restrictions as lithium-ion batteries.

Specifications subject to change without notice

For further information, email
sales@deepsea.com

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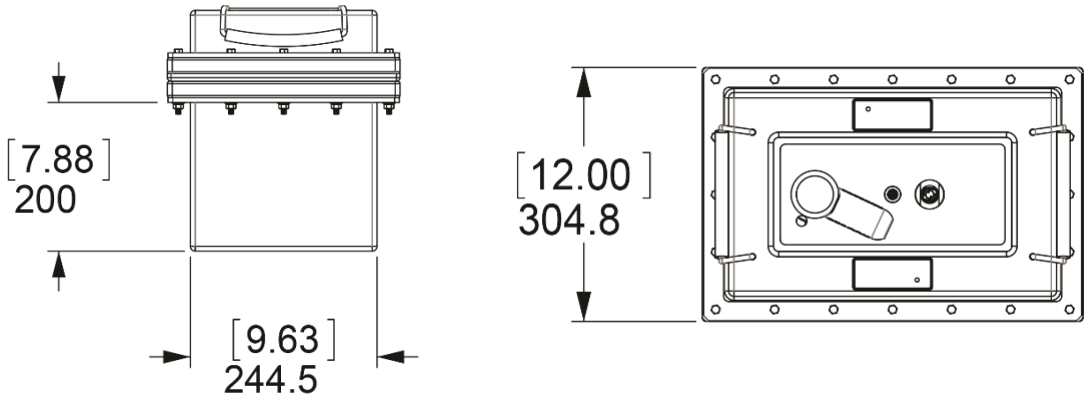
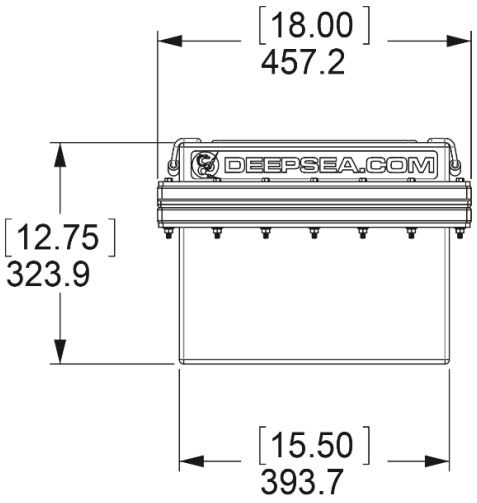
Specifications

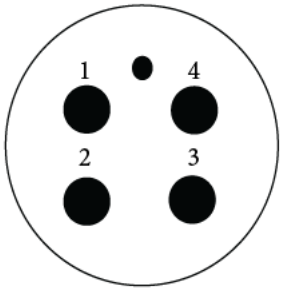
	SB-12/80	SB-24/40	SB- 48/18
Environmental			
Depth Rating	11,000 m		
Charging Temperature Range	-15° C to 50° C [5° F to 122° F)]		
Operating Temperature Range	-20° C to 60° C [-4° F to 140° F]		
Recommended Storage Temperature Range	0° C to 30° C [32° F to 86° F]		
Electrical	**SB-12/80**	**SB-24/40**	**SB-48/18**
Standard Configuration	12 volt 80 amp/hour	24 volt 40 amp/hour	48 volt 18 amp/hour
Max Discharge Rate	Dragonfish IL4FS: 16 Amps SEACON AWO-3 w/G: 100 Amps		
Mechanical	**SB-12/80**	**SB-24/40**	**SB-48/18**
Length	457.2 mm (18 in)		
Width	304.8 mm (12 in)		
Height	323.9 mm (12.75 in)		
Weight in Air	48.20 kg [106 lbs.] +/- 2%		49 kg [108 lbs.] +/- 2%
Weight in Water	18.2 kg [40 lbs.]		19.1 kg [42 lbs.]
Case	Molded Polyethylene		
Diaphragm	Molded Polyurethane		
Compensating Fluid	Inert oil		
Connector	**SB-12/80**	**SB-24/40**	**SB-48/18**
Connector	Right angle diaphragm penetrator on 2-meter cable terminated with Standard: Dragonfish IL4FS connector + Female Locking Sleeve Optional (High Current): SEACON AWO-3FS w/G + Female Locking Sleeve		
Chargers	**SB-12/80**	**SB-24/40**	**SB-48/18**
Charger	SB-CHG-SW/12	SB-CHG-SW/24	SB-CHG-120/48 SB-CHG-240/48

Dimensions



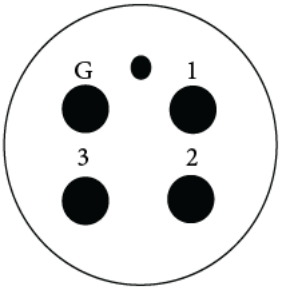


Standard Connector



IL4FS

Pin 1 = Ground
Pin 2 = + Volts
Pin 3 = + Volts
Pin 4 = Ground



AWO-3 W/G-FS

Pin 1 = Ground
Pin 2 = + Volts
Pin 3 = + Volts
Pin G = Ground

Lasers

DeepSea SeaLasers® provide fixed-offset laser alignment for accurate subsea measurement and scaling. Designed for integration with inspection cameras and imaging systems, SeaLasers project precise reference points onto a target surface, enabling operators to determine object size, crack length, or feature spacing directly from recorded imagery.

Two laser configurations are available, each offered in red or green wavelengths and in dot or line patterns to suit different visibility and measurement preferences. Rugged, depth-rated housings ensure reliable operation in demanding subsea environments, while fixed optical alignment maintains consistent spacing for repeatable, dependable scaling results.

SeaLasers at a Glance

Model	Micro SeaLaser®	SeaLaser® 100
		
Laser Option	Red or green	Red or green
Depth Rating	6,000 m	2,000 m
Housing Material	Titanium 6AL-4V	Acetal plastic (Delrin®)
Port	Sapphire, anti-reflective coated	Acrylic
Level	Premium	Entry-Level

Micro SeaLaser®

UP TO 6 KM DEPTH RATING

COLOR OPTIONS

ULTRA COMPACT SIZE

Reliable and Capable Integration

Compact size for space-constrained operations

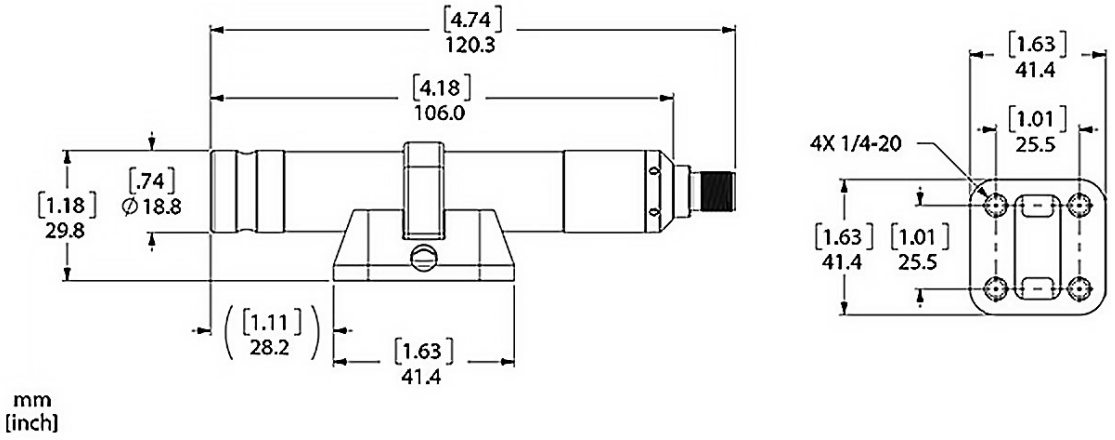
The compact Micro SeaLaser features a sapphire port, a titanium housing, 6,000 m depth rating, and a <5 mW Class III-A semiconductor laser diode. Uses include underwater aiming, scaling, and alignment. This subsea laser has a long life, compact size, and wide input voltage. Applications include measurement, scaling, reference pointing, and aligning.

A mounting bracket is available to fit two lasers and a SeaCam. The two lasers are 10 cm apart and use either dots or lines to add scale to video or photographic images.

Specifications

Micro SeaLaser		
Laser	**Red Laser**	**Green Laser**
Type	Continuous Wave Semi-conductor laser diode Class III-A	
Beam Diameter	Elliptical 1.8 mm x 0.5 mm	<2 mm
Wavelength	635 nm	532 nm
Beam Divergence	0.09 mRad x 0.19 mRad	1.2 mRad
Beam Alignment	Beam runout 5 cm at 10 m (2 in. at 33 ft) max	
Beam Power	<5 mW	
Beam Type	Dot or Line	
Environmental		
Depth Rating	6,000 m	
Operational Temperature	Dot: 1°C to 30°C (32°F to 86°F)	Line: -10°C to 50°C (14°F to 104°F)
Electrical		
Voltage	7~30 VDC	
Current	47 mA	
Mechanical		
Housing	Titanium 6AL-4V	
Port	Sapphire, anti-reflective coated	
Weight in Air	75 g (2 oz)	
Weight in Water	40 g (1 oz)	
Connector	Impulse Sub-Miniature Connector IE55 2-pin	
Accessory	Dual Micro SeaLaser Mount	

Dimensions



SeaLaser 100

UP TO 2 KM DEPTH RATING

COLOR OPTIONS

COMPACT SIZE

Cost-Effective Laser Solution with Various Connector Options

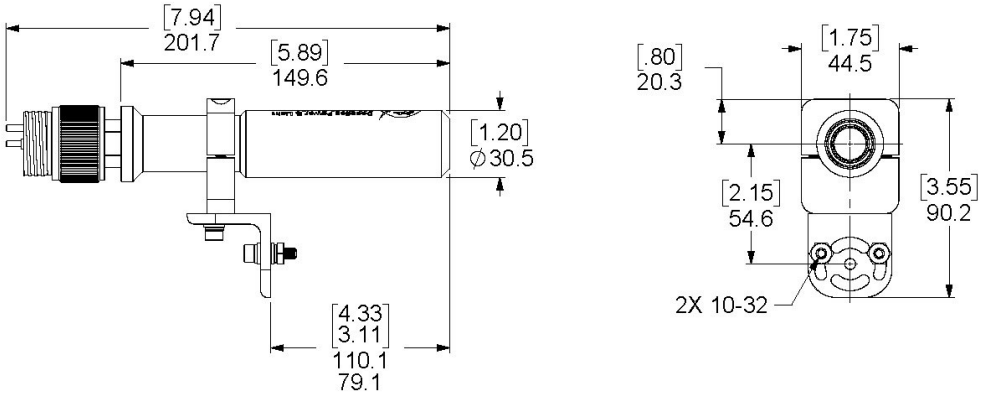
The SeaLaser 100 features a 2,000 m depth rating, <5 mW Class III-A semiconductor laser diode, Delrin® housing, and multiple connector options. Uses include underwater aiming, scaling, and alignment. This subsea laser has a long life, compact size, and wide input voltage.

A mounting bracket is available to fit two lasers and a SeaCam. The two lasers are 10 cm apart and use either dots or lines to add scale to video or photographic images.

Specifications

SeaLaser® 100		
Laser	**Red Laser**	**Green Laser**
Type	Continuous Wave Semi-conductor laser diode Class III-A	
Beam Diameter	Elliptical 1.8 mm x 0.5 mm	Circular
Wavelength	635 nm	532 nm
Beam Divergence	0.09 mRad x 0.19 mRad	<1.2 mRad
Beam Alignment	Beam runout 5 cm at 10 m (2 in. at 33 ft) max	
Beam Power	N/A	
Beam Type	Dot or Line	
Environmental		
Depth Rating	2,000 m	
Operational Temperature	Dot: 1°C to 30°C (32°F to 86°F)	Line: -10°C to 50°C (14°F to 104°F)
Electrical		
Voltage	7~27 VDC	
Current	250 mA	
Mechanical		
Housing	Acetal plastic (Delrin®)	
Port	Acrylic	
Outer Diameter	30.5 mm (1.20 in)	
Overall Length without connector	149.6 mm (5.89 in)	
Weight in Air	330 g (0.73 lb)	
Weight in Water	140 g (0.31 lb)	
Connector	BH2MP	

Dimensions



[inch]
mm

Accessories & Technology

The systems that connect, control, and complete your subsea platform. From intelligent communication protocols to rugged mounting solutions, DeepSea accessories and technologies ensure seamless integration across your underwater system.

SeaSense® Serial Protocol

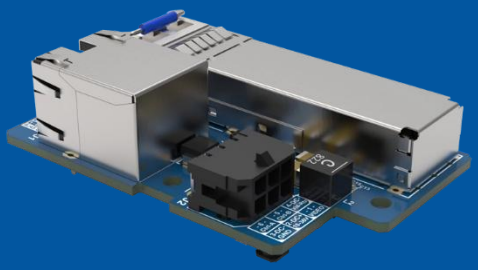
The SeaSense serial protocol enables flexible, real-time access to advanced onboard monitoring, diagnostic, and control technologies over standard EIA-485 and EIA-232 industrial serial interfaces. A common base command set across all SeaSense-enabled products keeps basic setup and operation consistent and simple. SeaSense uses human readable commands with simple formatting rules and an optional checksum field. Built-in real-time validation and error tolerant operation make testing and troubleshooting straightforward. SeaSense-enabled devices can operate in multi-protocol installations where the SeaSense protocol extends the functionality of legacy protocols such as Sony VISCA[1].

FleXlink®

DeepSea's exclusive FleXlink technology is a cost-effective and robust alternative to coaxial and fiber optic interconnects in subsea HD and 4K/UHD video transmission. FleXlink uses reliable unshielded twisted pair (UTP) conductors and readily available Ethernet-type interconnectors to reduce infrastructure cost and solve common problems with subsea HD/4K camera integration.

FleXlink-compatible products include:

- **Vertex SeaCam®**
- **HD Zoom SeaCam®**
- **HD Multi SeaCam®**
- **Optim SeaCam®**
- **Apex SeaCam® (Legacy)**



[1] VISCA is a trademark of Sony Corporation.

Brackets

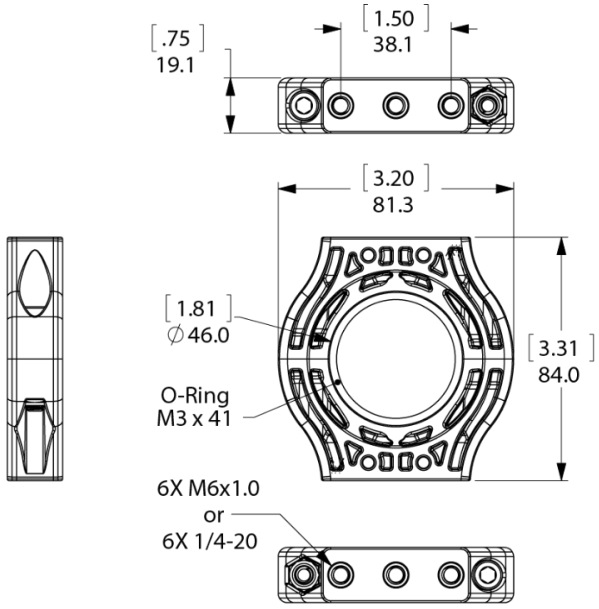
Brackets are available for our lights and cameras to securely mount to your ROV, diving equipment, and other applications.

2-Piece Mounting Bracket

Compatibility:
SeaLite Sphere®-DMC-TI-M
SeaLite Sphere®-DMC-TI-I

Metric: 2-piece mounting bracket with Titanium 6 mm thread size inserts.

Imperial: Titanium 1/4-20" thread size inserts. Used with SeaLite® Sphere 100 and 150 series.

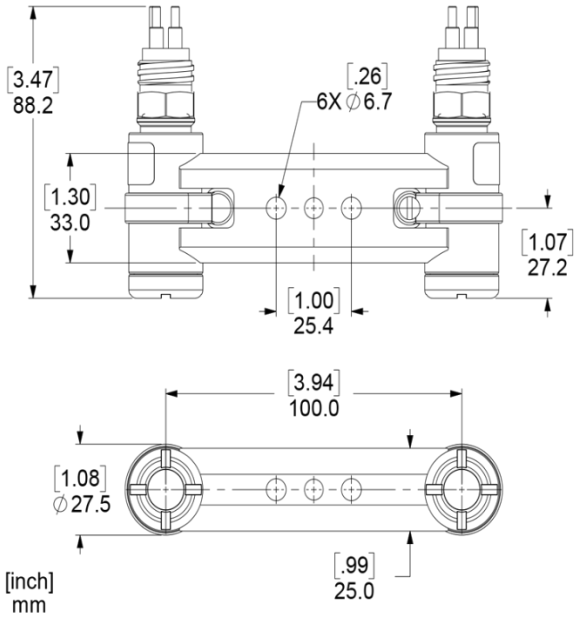


mm [inch]

Dual Nano Bracket

Compatibility:
Nano SeaLite®-DMC-TI-M
Nano SeaCam®-DMC-TI-I

Fits a Nano SeaLite® and Nano SeaCam®, or a pair of either the Nano SeaLite or Nano SeaCam.

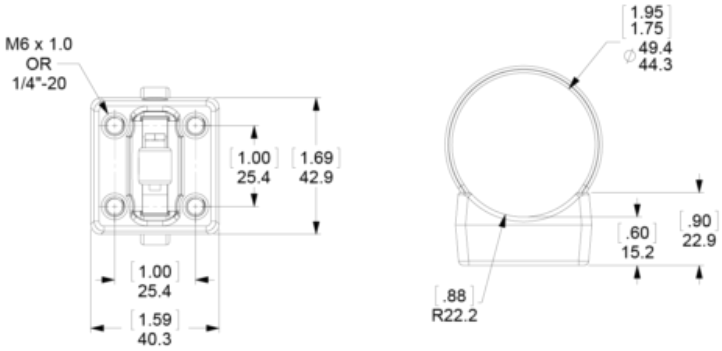


Saddle Mounting Bracket

Compatibility:
LED SeaLite®-SDL-M/I
MultiRay® LED SeaLite®-SDL-M/I

Metric: Saddle mounting bracket for LED SeaLite® and Multiray® LED SeaLite® with Titanium 6 mm Metric threads.

Imperial: Saddle mounting bracket for LED SeaLite® and Multiray® LED SeaLite® with Titanium ¼-20” threads.



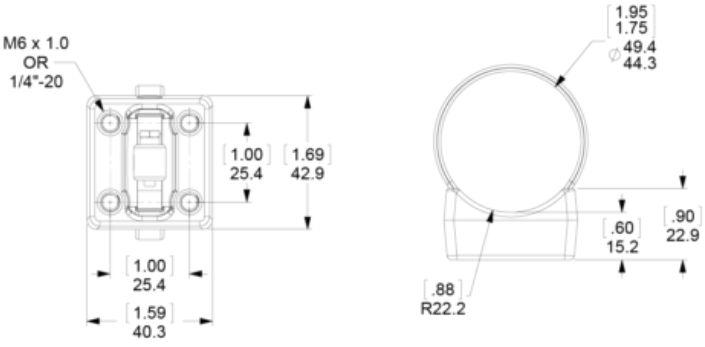
mm [inch]

Multi SeaCam Bracket

Compatibility:
Multi SeaCam®-BRKT-M

Metric: Multi SeaCam® bracket with Titanium 6 mm Metric threads.

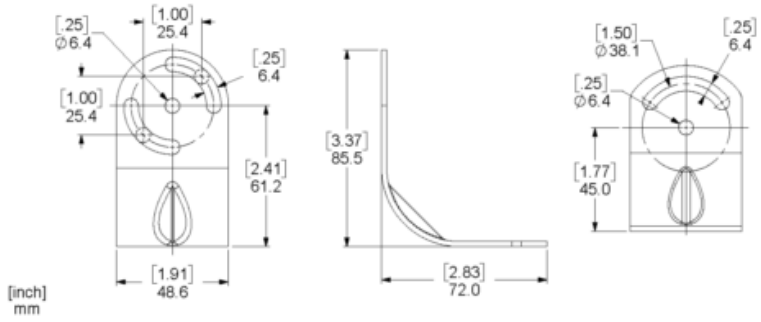
Imperial: Multi SeaCam® bracket with Titanium ¼-20” threads.



mm [inch]

L Bracket

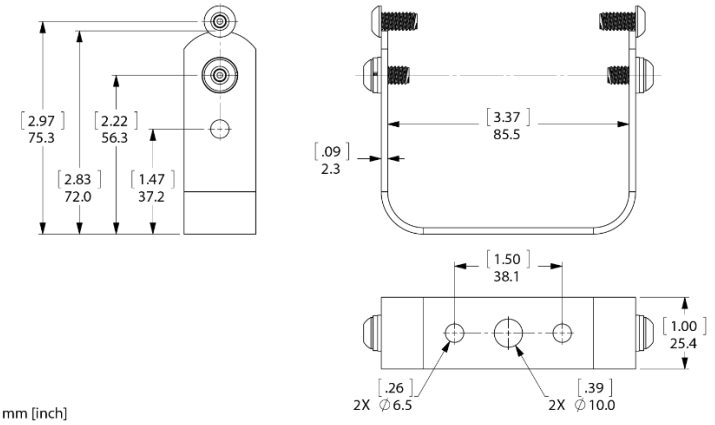
Compatibility:
LED SeaLite®
Multi SeaCam®
SeaLite® Lumos



Adapts to hole pattern of the SLS bracket series.

Yoke Mounting Bracket

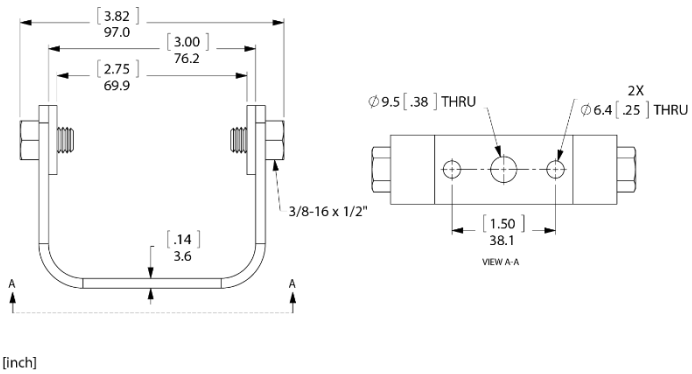
Compatibility:
LED SeaLite®-DMC-Ti-I/M
ML-DMC-Ti/M
SeaLite Sphere®-DMC-Ti-I/M



New yoke mounting bracket used with the new 2-piece mounting bracket.

Yoke Mounting Bracket (Legacy)

Compatibility:
Multi SeaLite®

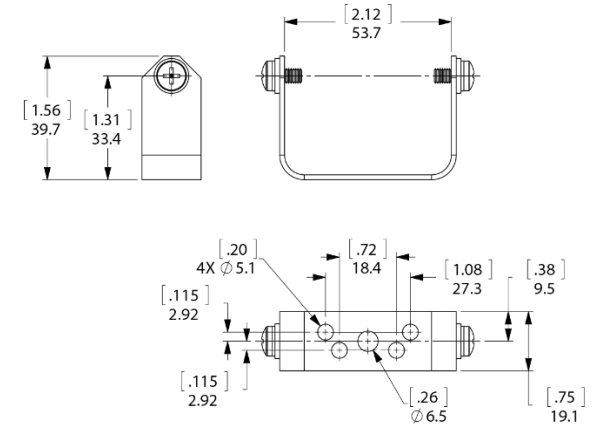


Yoke mounting bracket used with Multi SeaLite series lights (except wet/dry model and Multi SeaLite 3).

Small Yoke Mounting Bracket

Compatibility:
UBSC Bracket

Used in combination with the UBSC bracket.

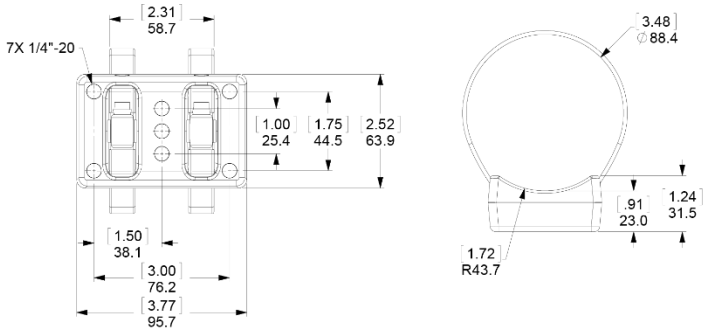


mm [inch]

Super SeaCam® Bracket

Compatibility:
HD Zoom SeaCam®
Super SeaCam Housings
Super SeaCam® 5000

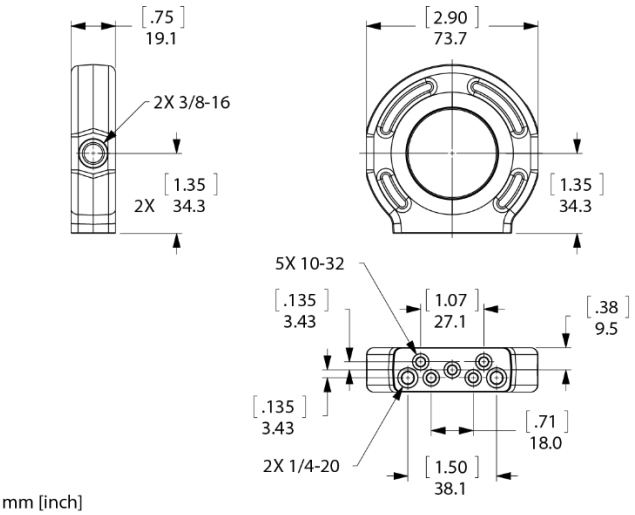
Mounting bracket for HD Zoom SeaCam®, SSC housings, and Super SeaCam® 5000.



mm [inch]

ML-DMC

Compatibility:
Multi SeaLite® – Halogen
LED Multi SeaLite® & LMS Matrix
SeaLite® Sphere – Legacy
Legacy mounting bracket with stainless steel inserts. Replacement is 2-piece mounting bracket with Titanium inserts.



mm [inch]

Contact Us

Main Phone: 1-800-ITS-DSPL (487-3775)
Local: +1-858-576-1261
Sales: +1-858-244-4789
Support: +1-858-244-4790
Fax: +1-858-576-0219

Product Support: **help.deepsea.com** or scan the QR code

Product FAQs: **www.deepsea.com/faqs** or scan the QR code

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