

HD Multi SeaCam[®]

COMPACT HD IMAGING

The HD Multi SeaCam delivers high-quality full HD 1080p/30 video in a compact package. This subsea camera is available with multiple lens and port options supporting a range of optics from a narrow 40° to ultra-wide 150° horizontal field of view. All configurations have been designed to minimize optical distortion to the degree possible and provide high quality HD imagery at any depth. The HD Multi SeaCam is available with either uncompressed HD-SDI video transmission or streaming high quality h.264 compressed video over TCP/IP Ethernet. In the HD-SDI configurations, the HD Multi SeaCam can be configured for both coax interfaces or DeepSea's proprietary FlexLink[®] technology.

Key Features



Full HD Resolution



40° to 150° HFOV Options



Low Latency SDI and IP Streaming



10-36V and PoE Power Options



6 km Depth Rating, 11 km Options



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 ¹]	0.095 [0.002] Lux			0.095 [0.002] Lux		

Sensor and Video Format Specifications				
HDMSC-	40XX-CX/FX	41XX-CX/FX	40XX-IP	41XX-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-	40XX-CX/FX	41XX-CX/FX	40XX-IP	41XX-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-	40XX-CX/FX	41XX-CX/FX	40XX-IP	41XX-IP
Housing	Titanium	6km Titanium 11km: Titanium, Stainless Steel ²	Titanium	6km Titanium 11km: Titanium, Stainless Steel ²
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-	40XX-CX/FX	41XX-CX/FX	40XX-IP	41XX-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		Ethernet: SubConn DBH8M, Stainless Steel	
	FlexLink: SubConn DBH8M, Stainless Steel		Power Only: SubConn BH4M, Stainless Steel	
<i>Contact Sales for additional options</i>				

¹ Higher sensitivity mono sensor chroma sensor option only available with IP video format options.

² 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

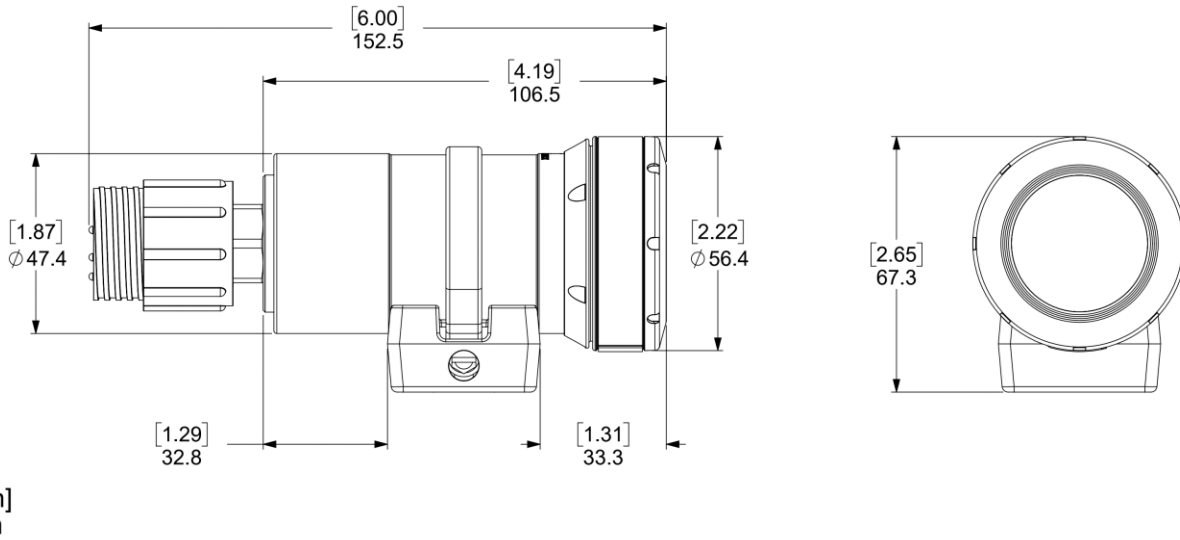
BULKHEAD	SUDBH8M/S			SUDBH8M/S		SEM CBH8M/S	
COAX	SubConn HF75CX6BHM		FLEXLINK	SubConn DBH8		SEA-CON MCBH8M-NET	
	MALE PIN VIEW			MALE PIN VIEW		MALE PIN VIEW	
PIN	HD Camera Hybrid Coax Tristate	HD Camera Hybrid Coax Serial	PIN	HD Camera Flexlink Tristate	HD Camera Flexlink Serial	HD Camera Flexlink Tristate	HD Camera Flexlink Serial
1	DC-	DC-	1	SDI+	SDI+	DC+	DC+
2	DC+	DC+	2	SDI-	SDI-	DC-	DC-
3	N/C	N/C	3	N/C	N/C	OSD ↑/↓	↓TxD/A-
4	N/C	N/C	4	N/C	N/C	OSD →/←	↑RxD/B+
5	OSD ↑/↓	↑RxD/B+	5	DC+	DC+	SDI+	SDI+
6	OSD →/←	↓TxD/A-	6	DC-	DC-	SDI-	SDI-
COAX	SDI	SDI	7	OSD ↑/↓	↓TxD/A-	N/C	N/C
SHIELD	SDI REF	SDI REF	8	OSD →/←	↑RxD/B+	N/C	N/C
PINOUT	08E021	06X020		08C042	08C016	08C020	08C003

IP CONFIGURATIONS

BULKHEAD	SUDBH8M/S		SEM CBH8M/S		SRSEANET/S
ETHERNET	SubConn DBH8		SEA-CON MCBH8M-NET		Schilling Robotics SEANET
	MALE PIN VIEW		MALE PIN VIEW		
PIN	Ethernet Camera Discrete Power 10/100Mbps	Ethernet Camera PoE 10/100Mbps	Ethernet Camera Discrete Power 10/100Mbps	Ethernet Camera PoE 10/100Mbps	IP Camera NIM
1	DC-	0V PoE	TD-	TD-	DC+
2	DC-	0V PoE	TD+	TD+	DC-
3	DC+	48V PoE	RD-	RD-	CHASSIS
4	DC+	48V PoE	RD+	RD+	RD-
5	TD-	TD-	DC-	0V PoE	RD+
6	TD+	TD+	DC-	0V PoE	TD-
7	RD-	RD-	DC+	48V PoE	TD+
8	RD+	RD+	DC+	48V PoE	
PINOUT	08E021	08E025	08E022	08E023	07E004

Dimensions

HDMSC-40XX | SAPPHIRE FLAT PORT



HDMSC-41XX | GLASS DOME PORT WITH AND WITHOUT COWL

