



STR SeaSpyder telemetry drop camera system



The SeaSpyder Underwater Drop Camera System is part of a family of field proven camera systems manufactured by STR for the marine survey and environmental communities. This technology has been developed continually by STR for several years in order to satisfy the ever increasing demand for quality and performance.

The SeaSpyder Telemetry system is designed for operation in water depths up to 1000m utilising standard coaxial sonar umbilicals.

The system as standard offers simultaneous uninterrupted recording of low latency live video footage along with

high resolution stills photography, along with interfacing to a wide range of sensors and dataloggers

The stills camera is fitted with a high quality 18 mega pixel digital SLR Camera offering full control of all photographic parameters including manual focus, shutter speed and aperture. The stills camera is housed within a robust 1000m rated aluminium enclosure along with an internal IP video camera.

All data is transferred directly to the surface unit for live interpretation, this includes video, stills photos, serial sensor data and Ethernet data such as an imaging sonar.

KEY FEATURES

- Operation in water depths up to 1000m
- Simultaneous uninterrupted recording
- Interfacing to wide range of sensors and dataloggers
- High resolution stills photography
- Direct data transfer for live interpretation
- Fully remote controllable stills camera settings

WWW.STR-SUBSEA.COM

STR SeaSpyder telemetry drop camera system

SEASPYDER TELEMETRY RACK

MOUNT PROCESSOR- SP-PRO2	
Hardware:	Standard 19" Rack
	Mountable
Processor:	Intel i7 3770 3.4GHz
	Quad-Core
Memory:	8GB DDR3 RAM
Storage: 1TB int	ternal hard drive & 4TB
rer	movable drive in caddy
Interface:	DVD-RW, 2 x 1 GigE,
	6 x USB, 8 x RS232
Display: 2 x	22" LED HDMI Monitor
Power: 110/24	40 VAC, 50 Hz (900W)
Dimensions: 19" 3U rack mountable	
550 mm (L) x 48	5 mm (W) x 132mm (H)

SEASPYDER TELEMETRY SURFACE **CONTROL UNIT - ST-TSU**

Power Input: 100 - 264 VAC (47 - 63 Hz) ffi 500 W max 19" 4U rack mountable **Dimensions:** Interface: 2x 100Mbps Ethernet, 8x RS232/485 serial ports, TTL Trigger Input*

Cable Diagnostics: Low & High Voltage closed loop cable diagnostics, cable polarity test, cable leakage, open and short circuit protection, built in current limit. Voltage and Current LED readout. Fault Indicator LEDs and audible alarm.

*Optional TTL Trigger input available for USBL operation.

SEASPYDER SUBSEA MULTIPLEXER - SP-TM-1000

Power Input:	340VDC
Power Output:	24VDC 200W
Interface:	ADSL/Ethernet
Dimensions: 454mm ((L) x 200mm Dia.
Weight (Air/Water):	16.5kg/2.3kg
Housing: Hard and	odised aluminium
Depth Rating: 1000	

SEASPYDER	DROP CAMERA FRAME
Length:	2.21m (with tail fin), 1.55m
	(no tail fin)
Width:	1.43m
Height:	1.40m (with tail fin), 1.18m
	(no tail fin)
Weight in Ai	r: 91kg (empty frame),
	142kg (fully loaded)

SEASPYDER TELEMETRY 18MP DIGITAL STILLS CAMERA - SP-TM-1000

Power Output: 24VDC on User Ports (12VDC option on Port 3); 200W Max.

Interface:

1 x Underwater Flash 4 x 24VDC LED Lamps 2 x RS232 Ports with 24VDC 1 x RS232 Port with 12 VDC/ 24VDC 1 x Dual Scaling Lasers 1 x 12V LAN Port **Dimensions:** 413mm x 213mm Dia. Weight (Air/Water): 19kg/4.3kg in air/water **Housing:** Hard anodised aluminium **Depth Rating:** 1000m **Image Size:** JPEG (720 x 480) to (5184 x 3456) RAW (5184 x 3456) **ISO Sensitivity:** Auto (100 - 6400), 100 - 12800 Sensor Type: 22.3 x 14.9mm CMOS Aspect Ratio: 3:2 **Shutter Speed:** 30 - 1/4000 Sec **Aperture Range:** F3.5 - F22 **Focal Length:** 18mm Manual & Automatic mode Focus: ≈53° in water Angle of View: Lens: Acrylic Viewport Video Resolution: 800*592 at 25FPS (default) Video Format: H.264 IP Video Video Sensor: 1/3" CMOS Video Minimum Illumination: 0.1Lux

SEASPYDER HIGH POWER FLASH - MP-F

Control: TTL control via digital stills camera **Power Input:** Power supply via stills camera **Depth Rating:** 3000m Hard anodised aluminium Housing: 248mm x 152mm Dia **Dimensions:** (Without connector) Weight (Air/Water): 8kg/4.8kg

SEASPYDER 20W LED LIGHT - MP-L3

Lighting: LED Lamp Luminous Flux: 1500Lm Wavelength: Neutral white **Power Input:** 24VDC at 1.1A (Built in thermal protection) Dimensions: 70mm (L) x 110mm Dia. Weight (Air/Water): 1kg/0.58kg Housing: Hard anodised aluminium **Depth Rating:** 3000m

STR LASER POINTER / LINE GENERATOR

Red Dot **Power Input:** 8 - 30VDC (30mA at 24VDC) Fault Protection: Reverse polarity input protection with self reset fuse. Type: 2 x Class II Safety Classification

Beam Shape: Elliptical (Approx. 6mm red dot output) **Beam Divergence:** 0.75mrad Wavelength: 650nm **Depth Rating:** 3000m Standard / 6000m option available Control: NA **Green Dot** 8 - 30VDC (60mA at **Power Input:** 24VDC) **Fault Protection: Reverse** polarity input protection with self reset fuse. Type: 2 x Class II Safety Classification 60° Line / 90° Line Beam Shape: / 30° Cross **Beam Divergence:** 0.2mrad Wavelength: 520nm **Temperature Range:** -10°C to 40°C **Housing Material:** Black Hard Anodised Aluminium **Dimensions:** 205mm x 38mm Dia 360g in air / 130g in water Weight 3000m Standard / **Depth Rating:** 6000m option available Connector: Subconn MCBH2M / MCIL2F & MCDLSF Mating Half Control: NA **Green Line Power Input:** 8 - 30VDC (160mA at 24VDC) Fault Protection: Reverse polarity input protection with self reset fuse. Type: 2 x Class 3B Safety Classification (35mW output) 60° Line / 90° Line **Beam Shape:** / 30° Cross 0.25mrad single **Beam Divergence:** axis Wavelength: 520nm -10°C to 40°C **Temperature Range: Housing Material:** Black Hard Anodised Aluminium **Dimensions:** 205mm x 38mm Dia Weight: 360g in air / 130g in water Depth Rating: 3000m **Connector:** Subconn MCBH2M / MCIL2F & MCDLSF Mating Half Control: Internal Thermal Protection at45°C / TTL&PWM Options available upon request

UMBILICAL OPTIONS

Rochester A301241 (0.68") (17mm) -3000m Max Rochester A302799 (0.45") (11.43mm) - 1500m Max Rochester A304874 (0.25") (6.53mm) - 700m Max Other umbilical types supported please consult STR for further info.

All information contained in this brochure may be subject to change without prior notice.

WWW.STR-SUBSEA.COM