

DTS-6

Deep Sea Telemetry



Sea & Sun
Marine Tech

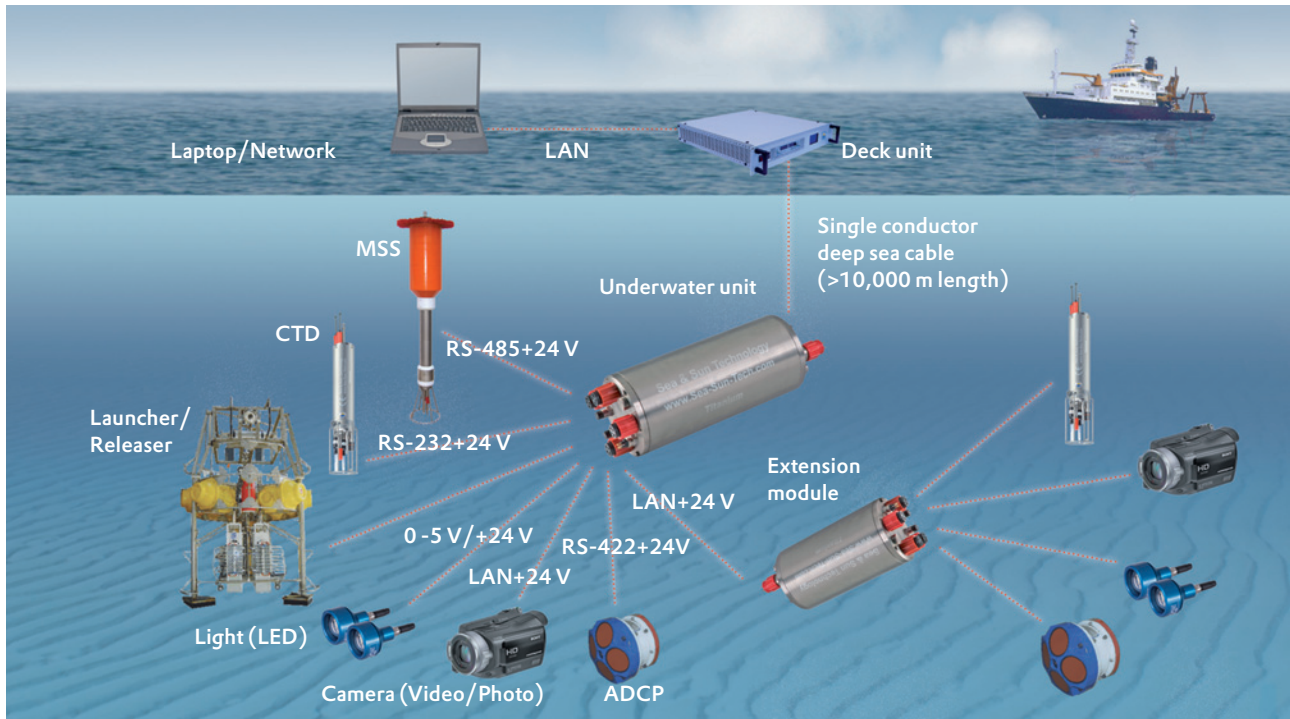


For standard CTD cable
up to 10,000 m length,
data transmission up to 100 MBit/s
for real time monitoring

Figure: 50 %
of original size

DTS-6

Deep Sea Telemetry



The DTS-6 was originally designed for specific scientific research, where high speed data transmission from a towed fish over long cables and ship winches was required. This system has effectively solved the problem with high speed serial data transmission of up to 921,6k and has proven its reliability in real-time data monitoring.

The next development step was the integration of video functionality into the system. Today the subsea unit allows the operation of IP cameras with Ethernet connection and the remote control of suitable camcorders with full HD recording. Simultaneous online monitoring with standard D1/DVPAL resolution of 720x576 pixels is possible with a speed up to 30 frames/sec.

The quality of the video transmission with IP-camera is absolutely superior to conventional analog systems. Additionally, the telemetry system supports the dimming of LED floodlights.

As illustrated in the picture above the system's variability allows the expansion to more than six external devices by extender modules that can be connected to the central underwater unit. This facility allows the operation of extended underwater networks on the sea floor with a large number of sensors and instruments distributed over a wide area.

The data of all these sub-units will be bundled and transmitted by the main telemetry unit via coaxial or multiconductor cable to the top deck unit.

System properties

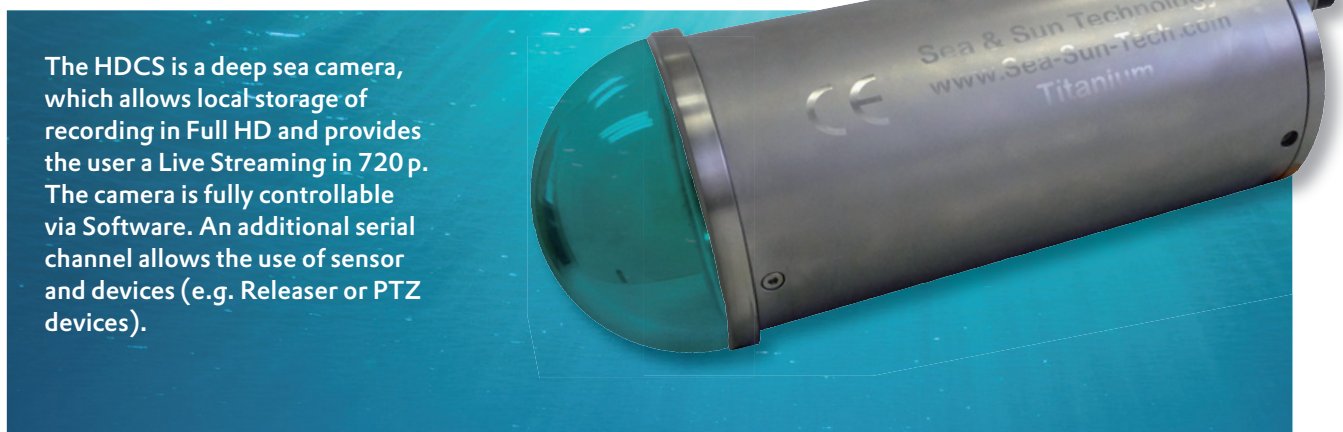
- Operation on all coaxial and multiconductor deep-sea cables
- Bit rates up to 25Mbit/s (100 Mbit/s optional)
- Bit rate 8Mbit/s@10 km cable (depending on cable)
- Remote controlled full HD recording with suitable camcorders and simultaneous online monitoring (Resolution: 720x576 pixel@ 25 frames/sec)
- Support of dimmed LED lamps (analog 0-5V or via RS485 bus protocol)
- 3 trigger channels
- Expandable to more than six connected devices
- Recommended to use with Sea & Sun HD Underwater camera (IP-camera)

DTS-6

Connector and Accessoires



HDCS 11 – High Definition Camera



General

- All functions controllable via software during operation
- Ideal in combination with Sea & Sun Technology Telemetry System
- User-friendly software for control and storage of live streams
- Controllable functions e.g. focus, zoom, record, exposure
- Videos and photos read out via USB connection without opening the housing

Environmental

- Operation temperature 0–50°C (32 – 104°F)

Mechanical

- Titanium housing
- Depth up to 6000 metres
- Dimension: diameter 110mm, length 290mm
- Weigh: In water 3.6 kg, In air 5.1 kg

Optical

- 10x optical zoom
- Autofocus/ manual focus
- Lens f= 4.25 – 42.5mm; F/ 1.8 – 2.8
- 30.4mm wide-angle
- Min. illumination 0.1 Lux

Electrical

- 1/3- inch HD CMOS sensor
- Power 18–48V DC
- Size of video Recordings: Full HD: 1920 x 1080 pixels
XP+, SP, LP mode: 1440 x 1080 pixels
- Size of photos: 1920 x 1080 pixels
- AVCHD video compression: MPEG-4 AVC/H.264
- Built-in memory: 32 GB + 128 GB optional

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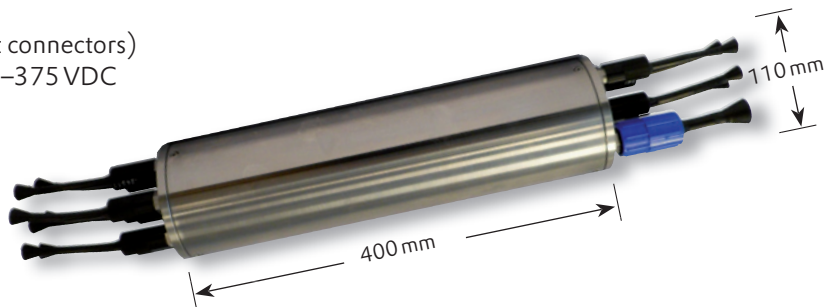
Deck unit

- input voltage range of power supply 85-265VAC
- cable output voltage up to 375VDC
- cable output current max. 1.4A (power 525W)
- network interface LAN/Ethernet RJ45



Underwater unit

- dimensions: 400 mm x 110 mm (without connectors)
- input voltage range of power supply 180-375 VDC
- max input current 1.4 A (252-525W)
- interfaces:
 - 6 bidirectional ports
 - 3 x RS232 / RS422,
 - 3 x RS422 / RS485 / RS232
 - max. baud rate 921.6 kbit/s
 - LAN / Ethernet e.g. for IP-cameras



Distributor:

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