

cNODE® MANTIS

- A pair of video transmitter and receiver units
- Video stream with up to 4 frames per second
- Transmitter uses composite video camera
- Receiver interfaces via ethernet
- 200 kHz operating frequency
- 30° directional transducer beam
- 500 m range
- 800 m depth rated



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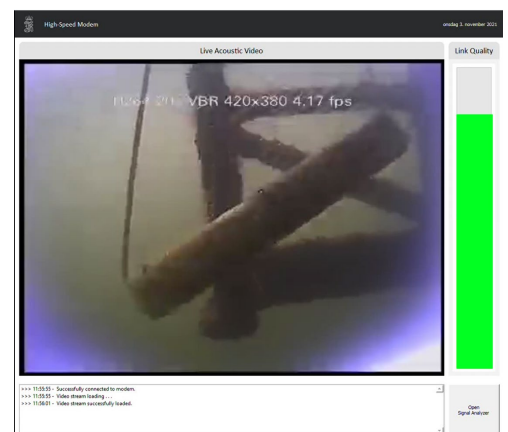
cNODE® Mantis acoustic video modem

The cNODE Mantis can work as 'a second set of eyes' in underwater operations. The live video is streamed from the camera unit to a receiver installed either on the ROV's TMS (Tether Management System) or on the vessel itself, at ranges of up to 500m. Data can also be transmitted from a Mantis transmitted on AUV to a surface vessel or USV.

As the wireless video transfer works on a high-speed acoustics link it will function in both murky and clear water conditions and is unaffected by background light. With a bit-rate of up to 70 kbit/s, it allows for the transfer of live video with a typical quality of 420 x 380 pixels at four frames per second. An external 24 V battery pack is used for the unit.

Sensor data and status from the camera unit is interleaved with the video stream. The received video stream, status and sensor data is displayed in the supplied Mantis Viewer Windows application. The video stream can be recorded and redirected to other users over an ethernet connection as a RTP stream.

The cNODE Mantis transmitter is controlled via high-speed command link.





UPLINK VIDEO STREAM

Stream video, 420x380, 4 frames per second

Ethernet output, RTP format

Interleaves sensor and status data

DOWNLINK CONTROL

Control data for camera

TECHNICAL DATA

cNODE Mantis video transmitter

Video interface	Composite video
Power	External 24 VDC battery
Power consumption	15 W
Size (L x diameter)	323 x 105 mm
Weight (air/water)	3.7 kg / 1.2 kg

cNODE Mantis video receiver

Data interface	Ethernet
Power	External 24 VDC
Power consumption	15 W
Size (L x diameter)	323 x 105 mm
Weight (air/water)	3.0 kg / 0.5 kg

Common data

Depth rating	800 m
Video transfer speed	Up to 70 kbits/s (4 FPS/420x380)
Command downlink speed	Up to 25 kbits/s
Transducer beam width	±15°
Max range	Up to 500 m *)
Operating temperature	-5°C to +55°C

*) Max range based on proven operations at 250 m range and S/N levels.

Specifications subject to change without any further notice.



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