NEXUS MK V Multiplexer

Description

The MacArtney NEXUS MK V multiplexer replaces the NEXUS 907 system. It is still based on the Focal 907 video/data multiplexer combined with the MacArtney MiniControllers, ethernet converters and the Focal Gb-media converters. The new power switching of all the sensors and cameras is software controlled and combined with monitoring of sensor power status.

The subsea housing is made of 6082 hard anodised aluminium and the Subconn connectors are also the anodised aluminium type. If more than 3000 msw depth rating is required the pressure vessel will be produced in Titanium or high tensile Duplex steel.

The fibre optic telemetry takes advantage of the CWDM (Course Wavelength Division Multiplexing) technology and communicates all signals over just one singlemode optical fibre.
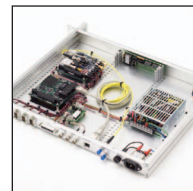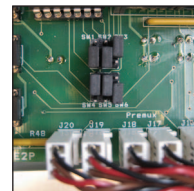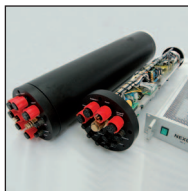
Features and benefits

- Interfaces all standard survey sensors and cameras
- Supplies power to sensors and cameras
- Software controlled
- Operates on one singlemode optical fibre

Applications

- ROV/ROTV multiplexer
- Survey sensor package multiplexer
- Multiplexer for subsea rigs and towed sledge systems

Options

- Titanium or high tensile steel pressure housing for water depths > 3000 metres.
- Interface for SeaBat 71xx series multibeam sonars
- Customised subsea controls

Specifications topside unit

Mechanical
Dimensions: 19" rack mount, 2 U high

Electrical
Supply voltage: 85-265 VAC, 50/60 Hz

Power consumption: 25 W

Various: Light diodes for status indication

Specifications subsea unit

Mechanical
Dimensions pod: OD 197 mm, total length including connectors app. 770 mm

Depth rating: 3000 msw (standard)

Material: Hard anodised aluminium (standard)

Weight in air: 50 kg

Weight in water: 26 kg

Electrical
Supply voltage: 85-132 and 180-264 VAC 50/60 Hz

Output voltage: 24/12 VDC/others

Power switching: 18x24 V and 4x12 V

Multiplexer
Multibeam-sonar signals: 2 (P)ECL, 125 Mb/s (Option: SeaBat 71xx interface)

Video channels: 3

RS 232: 9
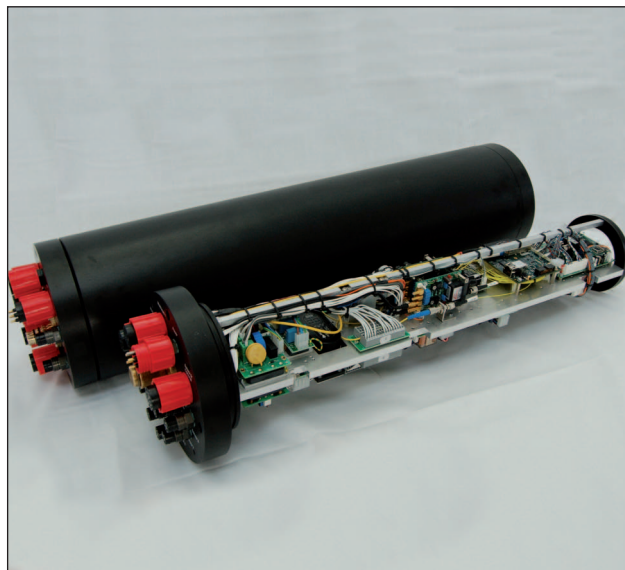
RS 232/485: 2

RS232/485/422/TTL: 1

Ethernet: 10/100 Base-T

Digital channels: 16 I/O

Leak: Occupies either 1 analog input or 1 digital input

Topside unit delivered in Pelican case.
Subsea unit delivered in flightcase.

Fibre optic
Fibre type: Singlemode 9/125 or multimode 50/125-62,2/125

Number of fibres required: 1 or 2

Flux budget: > 20 dB

Specification subject to change without notice