

NEXUS MK V

Video, multibeam and survey sensor multiplexer



The MacArtney NEXUS MK V multiplexer is based on the Focal 907 video/data multiplexer combined with the MiniController, Ethernet converters and the Focal Gb-media converters. Power switching of all sensors and cameras is software controlled and combined with monitoring of sensor power status.

The subsea housing is made from 7075 T6 hard anodised aluminium and the SubConn® connectors also represent the anodised aluminium type. For depth ratings over 3,000 MSW, the pressure housing can be manufactured from titanium or high tensile duplex steel.

The fibre optic telemetry takes advantage of the CWDM (coarse wavelength division multiplexing) technology and communicates all signals over just one singlemode optical fibre.

Features and benefits

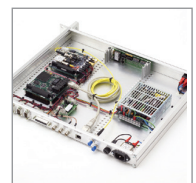
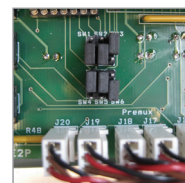
- Interfaces all standard survey sensors and cameras (including MacArtney LUXUS models)
- Supplies power to sensors and cameras
- Software controlled
- Operates on one single-mode optical fibre

Applications

- ROV/ROTV multiplexer
- Survey sensor package multiplexer
- Subsea rigs
- Towed camera and sensor systems

Options

- Titanium or high tensile steel pressure housing for the subsea unit
- Interface for SeaBat 71xx series multibeam sonars
- Customised subsea controls



Specifications - topside unit

Mechanical		Various:	Light diodes for status indication
Dimensions:	19" rack mount, 2 U high		
Electrical		Transport	
Supply voltage:	85-265 VAC, 50/60 Hz	Delivered in Pelicase	
Power consumption:	25 W		

Specifications - subsea unit

Mechanical		Digital channels:	16 I/O
Dimensions pod:	OD 197 mm, total length including connectors app. 770 mm	Leak alarm:	Occupies either 1 analog input or 1 digital input
Depth rating:	3,000 m (standard)	Fibre optic	
Material:	Hard anodised aluminium (7075 T6 standard)	Fibre type:	Singlemode 9/125 or multimode 50/125-62,2/125
Weight in air:	50 kg	Number of fibres required:	1 or 2
Weight in water:	26 kg	Flux budget:	> 20 dB
Electrical		Transport	
Supply voltage:	85-132 and 180-264 VAC 50/60 Hz	Delivered in flight case	
Output voltage:	24/12 VDC/others		
Power switching:	18 x 24 V and 4 x 12 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		
RS 232/485/422/TTL:	1		
Ethernet:	10/100Base-T		