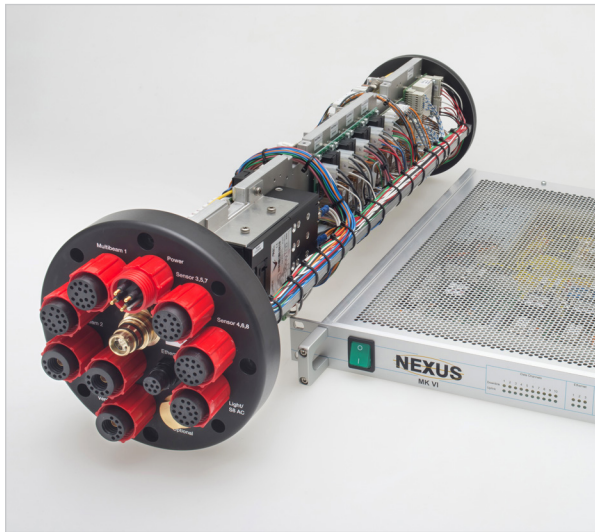


NEXUS MK VI HD

Multiplexer for ROV and survey applications



The MacArtney NEXUS MK VI is a HD video and multibeam sonar multiplexer that carries all signals over one single mode optical fibre via CWDM (coarse wavelength division multiplexing). Options include (P)ECL and 10/100 Ethernet cards.

Power switching is software controlled and can be installed on any computer with at least one real or USB com port. The protocol is open and can be integrated into customer software for monitoring convenience. Sensor power status, leak alarm, telemetry link, etc. are also continuously monitored by the software.

As standard, the subsea housing is manufactured from hard anodised aluminium. Connectivity interfaces include SubConn® anodised aluminium connectors, SubConn® coax (HD video) connectors and a MacArtney OptoLink fibre optical connector. For depth ratings over 3,000 MSW, the pressure housing can be manufactured from titanium or high tensile duplex steel.

Features and benefits

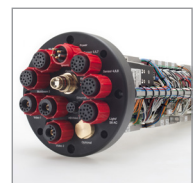
- Interfaces most standard survey sensors
- Software controlled power switching for sensors
- Interface for SeaBat 71xx, R2Sonic and Kongsberg multibeam sonar system (dual head)
- Three HD video interfaces (full broadcast quality)
- Operates on one single mode optical fibre

Applications

- ROV/ROTV multiplexer for HD video and multibeam-sonar survey sensor set-up
- Cable trencher systems
- Drop camera systems
- Towed camera and sensor systems
- Seabed monitoring applications including landers and observatory systems

Options

- Interface for SeaBat 81xx multibeam sonar head (P)ECL
- Interface for 10/100 Ethernet
- Customised subsea controls
- Titanium or high tensile duplex steel housing for the subsea unit



Specifications - topside unit

Mechanical		Various:	LEDs for status indication
Dimensions:	19" rack mount, 1 U high	Transport	
Electrical		Delivered in Pelicase	
Supply voltage:	85-265 VAC, 50/60 Hz		
Power consumption:	50 W		

Specifications - subsea unit

Mechanical		Fibre optic	
Dimensions:	OD 197 mm, total length including connectors approx. 750 mm	Fibre type:	Single mode 9/125
Depth rating:	3,000 m	Number of fibres required:	1
Material:	Hard anodised aluminium (7075 T6 standard)	Flux budget:	> 20 dB
Weight in air:	Approx. 32 kg	Diagnostics	
Weight in water:	Approx. 12 kg	Control:	Power switching with individually fused outputs
Multiplexer		Monitoring:	Leak sensor, voltage and current monitoring, link status monitoring and feedback on power status
Multibeam sonar signal:	2 x GbE (1000Base-T only) 2 x (P)ECL (optional)	Transport	
HD video:	3 x HD-SDI (SMPTE-424M and SMPTE-292M)	Delivered in flight case	
RS 232:	6 + 1 for internal control		
RS 485:	1		
RS 232/485/422/TTL:	2		
Ethernet:	1 x 10/100Base-T (optional)		
Electrical			
Supply voltage:	100-250 VAC 50/60 Hz 400 Hz (optional) 140-370 VDC (optional)		
Output voltage:	48/24/12 VDC		