

# Deepwater NEXUS HD Multiplexer



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). As a frequently selected option, the multiplexer comes with integrated (P)ECL and 10/100 Ethernet cards. It is designed and built to be a rugged, efficient and versatile HD solution for interfacing a wealth of different sensors, equipment and subsea systems to over 3,000m.

Primary applications for the NEXUS MK VI include the interfacing of multibeam-sonar heads with appurtenant survey sensors (e.g. gyro, MRU, INS, SVS) and up to 3 HD-camera signals on ROVs, ROTVs, trenching vehicles, towed sledges and other kinds of underwater instrumentation platforms.

On the NEXUS MK VI, 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. In order to secure optimal system control, factors such as sensor power status, leak alarm and telemetry link are continuously monitored by the software.

As standard, the subsea pressure housing is manufactured from hard anodised aluminium. Flange mounted connectivity interfaces include SubConn anodised aluminium connectors and a MacArtney OptoLink fibre optical connector. For depth ratings over 3,000 metres of water, the subsea pressure housing is manufactured from titanium or high tensile Duplex steel. The topside multiplexer unit comes in a 19" rack mountable casing with LEDs for system status indication.

## ROV Telemetry Interface

The NEXUS MK VI has recently been acquired by UK based MODUS Seabed Intervention, to provide the telemetry interface on a new subsea construction support ROV system. Empowered by its three HD multiplexer channels, the NEXUS MK VI will allow the ROV to carry HD cameras, providing optimal results during close-visual-inspection jobs and other ROV inspections tasks.

Another confirmed user of the NEXUS MK VI system is the international subsea rental company and equipment specialist, Ashtead Technology, who will make the NEXUS MK VI available to rental clients worldwide.

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