KD-CON™ ETHERNET MULTIPLEXER

4x 1G Ethernet (physical layer 1) with 5 port Gbps Switch

The KD-Con™ Ethernet fibre Mux is a rack mountable unit that fit the KD-Con™ subsea pod and topside rack. The LINK Ethernet card provides up to 4 channels of Gb Ethernet, physical layer (L1), with no package management or switch functionality.

This allows the system to be used with multi beam sonars, which stream data directly on the physical layer. However, to expand number of ports and to simplify interfacing to other survey equipment, the local Gb switch provide the "plug and play" functionality.

Backplane design together with all fibre units terminated to a single front plate LC fibre connector, enables easy system swap.

Units comes with complete fibre diagnostics when used together with the KD-Con™ Video Multiplexer.

FEATURES

- 4ch of 100/1000Base-T physical layer (L1)
- 5-port unmanaged gigabit switch
- Fibre optic diagnostic (interconnected through the Video Mux)
- Simplex SM 9/125 LC Fibre Connector
- Voltage: 10 – 12 V
- Power consumption: 850mA@12V
- 8ch CWDM, 1470 to 1610nM
- Fibre Transmit output power: 0 to +5dBm (Front LC Con: 0dBm typical)
- Fibre Receiver sensitivity: -28 to -9dBm (Front LC Con: -26 to -7dBm typical)
- Size: 3U, 14HP

| PART NO:	
101190	KD-CON™ ETHERNET MUX SUBSEA
101191	KD-CON™ ETHERNET MUX TOPSIDE

KD-CON™ ETHERNET MULTIPLEXER

The Ethernet mux contains a LINK Ethernet input fibre card and a 5 port Gbps switch. Topside is equivalent to the subsea unit except from its SFP configuration. An 8 channel CWDM links the LINK card fibre SFP transceivers to a single front plate LC fibre connector.

The AV Cards are the main node for the LINK family fibre optic diagnostics, topside and subsea. The SFP fibre transceivers transmit output power is typically 0 to +5dBm and receivers sensitivity is -28 to -9dBm. Hence minimum fibre line attenuation must be approx. 10dB. If necessary, attenuators have to be installed.

BACKPLANE CON

EURO-C 32P AC16 ST

PIN	A	C
2	0V (12V GND)	
4	12VDC	
6		
8	SDA	SCL
10	DATA -	DATA +
12	0V (12V GND)	
14		
16		
18		
20		
22	RESERVED	
24		
26		
28		
30		
32		
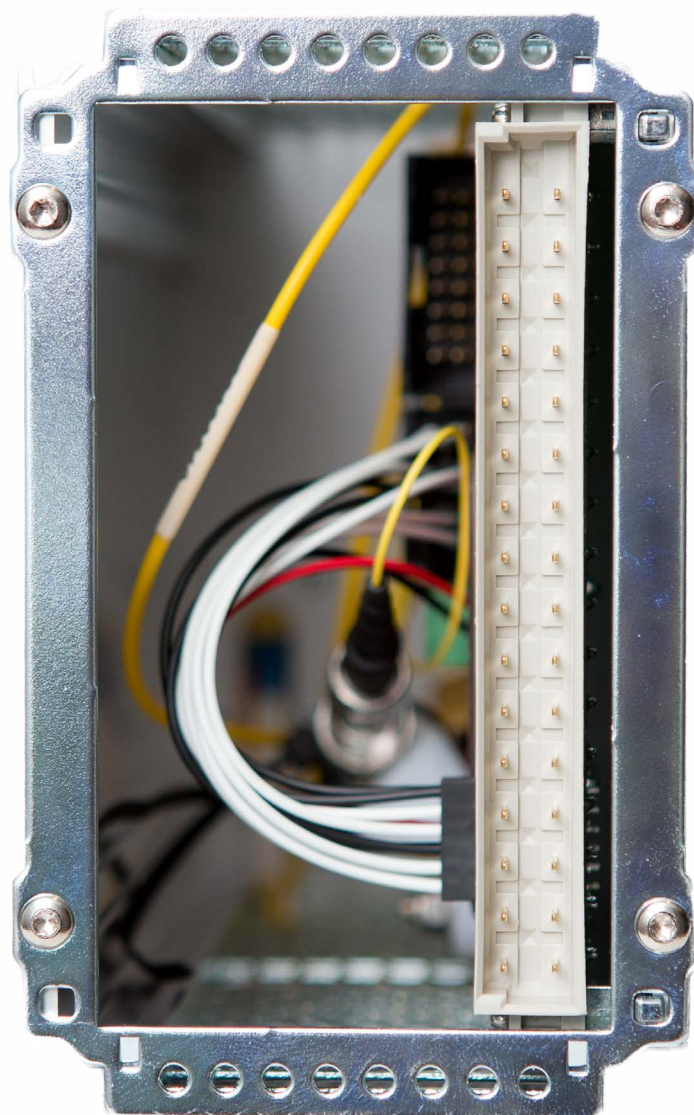
Please Note
- The LINK Ethernet card connector chassis is connected to 0v(12vdc) and not gnd. Make sure it do not connect to GND since that mayproduce a 12vdc GND fault. Use unscreened RJ45 cons when interfacing to the LINK Ethernet card. The Gb switch however is isolated from 0v(12vdc).
- Multi beam sonars shall be connected directly to the LINK Ethernet card and not through the switch, subsea and topside.
- Topside Ethernet MUX is equivalent to the Subsea mux. Hence, Topside Fibre Diagnostic SW will name the Link Ethernet output card as "Input"