



COE X-NetTM OPT8 Modules



Digital video, high speed data & CD quality audio transmission product for singlemode or multimode optical fibre.

The COE X-NetTM optical modules provide transmission of 8 video channels, 2 duplex 128kbps data channels, 2 CD quality duplex audio channels and 2 contact closure channels on one singlemode or multimode optical fibre. X-Net has been designed specifically for the professional surveillance market where high performance, high quality and flexible product configuration is required and introduces numerous innovative features which have been previously unavailable in CCTV products.

System Features and Benefits

Product Diagram

- 8, 10-bit encoded, uncompressed digital video channels
 4 times more sensitive to contrast changes than competing products. Ensures highest video quality under varying light and contrast conditions.
- Field upgradeable SFP lasers Modules can be field upgraded to CWDM or Long Haul version thus future proofing the investment.
- 18 wavelength CWDM Can be utilised to form an optical infeed system or fibre ring.
- Comprehensive network management features and SNMP support – Enables remote administration of complex CCTV installations via a standard web browser or applications such as HP OpenView, thus reducing the maintenance costs.
- Ultra low loss LC connectors For reduced insertion loss and increased operation range.

- **CD quality audio** For high grade intercom or PA applications.
 - High speed data channels Two independently configurable 128kbps data channels with support for RS232/422/485, easily configured via DIP switches.
 - Flexible dual redundant power supply options Support for rack mounted or external 12V DC, 24V AC, 220V AC or 48V DC dual redundant power supplies.
 - Comprehensive range of companion cards For cost effective system expansion (such as adding contact closures or supporting more telemetry devices) without the need for additional fibre.
 - Comprehensive 5 year warranty All X-Net modules are covered by a comprehensive 5 year warranty and have MTBF in excess of 100,000 hours.

8V 2D 8V 2D 2D 2D 2A 2D 2D 2CC 2CC 2CC

Sales Codes

X-Net OPT8T/R-VID

X-Net 8 x simplex video channel transmit/receive module, including 2 x simplex contact closure channels. Utilises 2 rack slots.

X-Net OPT8T/R-MAX

X-Net 8 x simplex video channel transmit/receive module, including 2 x duplex data, 2 x duplex audio, 2 x duplex contact closure channels. Utilises 2 rack slots.

Performance and Specifications

Video		Audio	
Video Channels	8	Channels	Up to 2
Format	10 bit uncompressed	Bandwidth	20Hz to 20KHz
Channel bandwidth	6.5MHz min	Format	16bit PCM
Video Input level	1Vp-p with +3dB overload point	Input Impedance	600 Ohms
Video channel gain	1	Output Impedance	< 30 Ohms
Impedance	75 Ohms unbalanced	Distortion	< 4 %
Signal/Noise ratio	>65 dB weighted	Input Level	0 dBm (2.2V p-p)
Diff Phase	0.5 °	System Gain	Unity
Diff gain	0.5 %	Configuration	Balanced
K rating	<1 %		
Connector	75 Ohms BNC	Contact Closure	
(Meets overall requirements of RS250B medium haul)		Channels	Up to 2
Data		Direction	Simplex or Duplex
Channels	Up to 2 independent channels		
Rate	128kbps	Environmetal	
Format	RS 232/422/485 (DIP switch	Operating temperature	-40 °C to +74 °C
	configured)	Storage temperature	-40 °C to +85 °C
Optical			
Optical budget (dB)	20 (37dB available on request)	Mechanical	
Range on 50 or 62.5/125um	2km	Double Slot	12HP x 4U x 167mm
multimode fibre (Km)			
Range on 9/125um	60 (>100km available on request)	Power requirements	
singlemode fibre (Km)		X-Net OPT8	+12VDC @500mA
Connector	LC		
		MTBF	
EMC		All Modules	>100,000 hours

EMC

EN55022 Class B, EN61000-3-2 Class A, EN61000-3-3, EN61000-4-2 6kV(C), 8kV (A), EN61000-4-3 10V/m, EN50204 20V/m, EN61000-4-6 10V, EN61000-4-4 2kV, EN61000-4-5 2kV, EN61000-4-8 50Hz & dc 100A/m, EN61000-4-9 300A/m, EN61000-4-11, EN60950-1:2002 + A1:2003, EN60825-2:2000



In line with the company policy of continuous improvement, COE reserves the right to vary descriptions and specifications without notice.

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