COE X-Net™ OPT8-ETHERNET

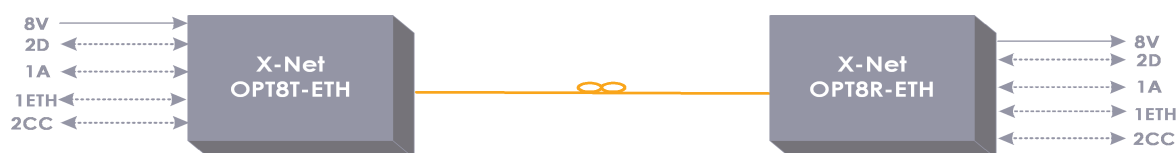## Digital video, high speed data & Ethernet transmission over a single optical fibre.

The COE X-Net OPT8-Ethernet enables you to realise the potential of a fibre optic network by providing digital video, high speed data , CD quality audio and Ethernet services over a single optical fibre.

Using this equipment, network architects may integrate a host of remotely based Ethernet services within their networks, which combined with the superb video quality and lowest PTZ latency that COE provides, heightens the functionality of a fibre optic infrastructure immensely.

System Features and Benefits

Eight, 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.

Built-in Ethernet LAN Extender - Functional compatibility to Ethernet services including ANPR, IP Cameras, Wireless LAN, IP Intercom etc.

Hot pluggable SFP laser optics - All X-Net transmission products utilise COE's exclusive SFP hot pluggable lasers. These can be removed and replaced in seconds in order to: allow you to increase tranmission range >120km, safe-proof your equipment eliminating costly engineering work and downtime.

CWDM ready SFP laser port - Upgrade to Coarse Wave Division Multiplexing optics to create drop and insert fibre optic rings.

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.

High speed data channel - 128kbps data channel with switch selectable support for RS232/422/485.

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.

System Diagram

Cyber Your Fibre!

The X-Net OPT8-Ethernet gives the user the best of both worlds of fibre optic and Ethernet based transmission, and as it is an agnostic, open product, it may be integrated within almost any existing fibre infrastructure to enable Ethernet Services. Using this product there is limitless potential to the number of Ethernet based services that can be made available over a fibre infrastructure.

Sales Codes

X-Net OPT8T/R-ETH X-Net 8 x simplex video channel transmit/receive module, including 1 x 10/100 BaseT Ethernet, 2 x duplex data, 1 x duplex audio, 2 x duplex contact closure channels. Utilises 2 rack slots.

Performance and Specifications

Video

Video Channels	8
Format	10 bit uncompressed
Channel bandwidth	6.5MHz min
Video Input level	1Vp-p with +3dB overload point
Video channel gain	1
Impedance	75 Ohms unbalanced
Signal/Noise ratio	>65dB weighted
Diff Phase	0.5°
Diff gain	0.5%
K rating	<1%
C/L Delay	40ns
Connector	75 Ohms BNC

(Meets overall requirements of RS250B medium haul)

Data

Channels	2 independent channels
Rate	128kbps
Format	RS232/422/485 (DIP switch configured)

Optical

Optical budget (dB)	20dB (up to 37dB available)
Range on 50 or 62.5/125um multimode fibre (Km)	2 typical*
Range on 9/125um singlemode fibre (Km)	60 (>120Km available**)
Connector	LC
Wavelength (nm)	1310 TX, 1550 RX

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

Audio

Channels	1
Bandwidth	20Hz to 20KHz
Format	16bit PCM
Input Impedance	600 Ohms
Output Impedance	<30 Ohms
Distortion	<4%
Input Level	0dBm (2.2V p-p)
System Gain	Unity
Configuration	Balanced

Contact Closure

Channels	2
Direction	Duplex

Ethernet

Channels	1
Direction	Full/Half Duplex
User Bandwidth	19Mb/s
Port	1 x RJ45

Environmetal

Operating temperature	-40°C to +74°C
Storage temperature	-40°C to +74°C

Mechanical

Dimensions	12HP x 4U x 167mm

Power requirements

X-Net OPT4/8-ETH	+12VDC @ 650mA

MTBF

Duration	>100,000 hours

* Typical distances only: Optical transmission distance is limited by optical loss of the installed fibre and installed fibre bandwidth.
**High powered versions are available upon request.

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