COE X-Net™ OPT1-T/R-INT

Features Digital video, **Aiphone compatible intercom,** high speed data and contact closure with dual redundant optical fibre transmission.
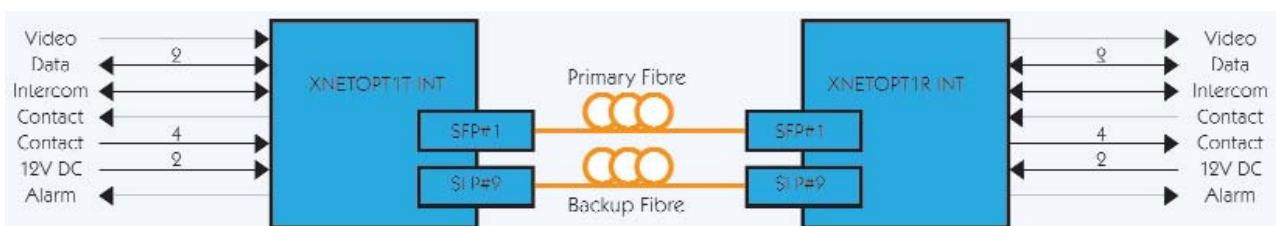
The COE X-Net™ OPT1-T/R-INT modules are ideally suited for transmission of video, data, alarms and intercom audio over twin redundant optical fibres.

The X-Net OPT1-T/R-INT modules are compatible with the Aiphone intercom system to facilitate simultaneous video and two-way intercom transmission across the network. Dual redundant fibre optic ports ensure transmission is never compromised.

System Features and Benefits

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.

Remote Management - Comprehensive remote management and diagnostics via X-Net Network Management System. Supports diagnostics via SNMP and web browers.

Field upgradeable SFP lasers - Modules can be field upgraded to CWDM or Long Haul version thus future proofing your investment.

High speed data channels - Two configurable data channels with support for RS232/422/485.

Ultra low loss LC connectors - For reduced insertion loss and increased operation range.

Flexible dual redundant power supply options - Support for rack mounted or external 12V DC dual redundant power supplies.

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.

Meets and Exceeds Transport Specifications - All X-Net modules have been designed for use in transport and industrial environments and therefrore meet or exceed the relevant, rail and light industrial, EMC specfications.

Dual Redundant Optics - X-Net OPT1-T/R-INT modules feature twin fibre, twin SFP (Small Form-factor Pluggable) optical lasers with automatic switchover times of under 2 seconds. These allow full monitoring on both fibres.

System Diagram

Sales Codes Continued...

X-Net OPT1T-INT   X-Net 1 x simplex video channel, 2 x data, 3 x Simplex CC, 1 x duplex CC, 2x dual redundant SFP fibre optic, with support for Aiphone intercom. Utilises 1 rack slot.

X-Net OPT1R-INT   X-Net 1 x simplex video channel, 2 x data, 3 x Simplex CC, 1 x duplex CC, 2x dual redundant SFP fibre optic, with support for Aiphone intercom. Utilises 1 rack slot

Performance and Specifications

Video

Video Channels	1
Format	10 bit uncompressed, PAL/NTSC
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	>65 dB weighted
Diff Phase	0.5 °
Diff gain	0.5 %
K rating	<1 %
Connector	75 Ohms BNC

(Meets overall requirements of RS250B medium haul)

Data

Channels	Up to 2 independent channels
Rate	Ch1: 128kbps Ch2: 64kbps
Format	RS 232/422/485 (2W & 4W)

Optical

Optical budget (dB)	20 *
Range on 50 or 62.5/125um multimode fibre (Km)	4
Range on 9/125um singlemode fibre (Km)	60
Connector	LC
Wavelength (nm)	1310/1550

* High powered versions with optical budget up to 37dB, for distances in excess of 120Kms, available on request.

Dual redundant optics with automatic switchover <2 Seconds

Intercom

Compatibility	Full compatibility with LE-D and LEF Aiphone intercom units.

Contact Closure

Channels	3 Simplex + 1 Duplex

Environmetal

Operating temperature	-40 °C to +74 °C
Storage temperature	-40 °C to +85 °C
Operating Humidity	Up to 95% RH (Non-condensing)

Power requirements

OPT1T/R-INT	+12VDC @ 250mA

MTBF

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