



COE X-Net™ Fast Media Converter



Ethernet to fibre media converter for long distance Ethernet transmission over fibre optic cable

The X-Net 10/100BaseT Fast Ethernet Media Converter provides media conversion from copper to fibre and vice versa coupled with long distance transmission over a single fibre optic cable. Ideal for applications that require Fast Ethernet over fibre such as ANPR, IP Codecs, IP Cameras, Megapixel Cameras, Wireless LAN and IP Intercom etc.

System Features and Benefits

- Ethernet LAN Extender** - Essential for Ethernet cable runs greater than 100 metres, the X-Net Fast Media Converter is the most cost-effective, reliable solution for mixed copper/fibre extensions to LANs, campus networks and Metropolitan Area Networks.
- Easy Integration** - The X-Net Fast Media Converter module uses the common X-Net racking and box system and can be utilised in conjunction with the X-Net range of IP codecs to provide IP video transmission directly over fibre optic cable.
- 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 transmission range >120km, and safe-proof your equipment eliminating costly engineering work and downtime.
- Single Fibre Utilisation** - Only a single fibre optic core is required for full duplex, bi-directional operation.
- Easy Installation** - The Auto-negotiating Ethernet function empowers the RJ45 port on X-Net Fast Media Converter to negotiate transmission speed and mode with peer devices automatically; and the Auto-crossover Ethernet port can prevent circuit mismatch problems by auto-sensing MDI/MDIX configuration. With these intelligent functions, X-Net Fast Media Converter can be paired with any standard Ethernet device via a UTP/STP cable.
- Comprehensive LED diagnostics** - Far end cable connectivity detection and associated alarm LEDs provide quick and intuitive fault indication.

System Diagram





Performance and Specifications

X-Net Media 100TX	X-Net 1 x Fast Ethernet/Fibre media converter module. Supplied with 1310nm TX/1500nm RX single fibre SFP optic. Utilises 1 rack/box slot.
X-Net Media 100RX	X-Net 1 x Fast Ethernet/Fibre media converter module. Supplied with 1550nm TX/1310nm RX single fibre SFP optic. Utilises 1 rack/box slot.
X-Net Box Single	X-Net Module box housing kit - Single unit.
PSU12VDC	Stand alone 12VDC/1.25 amp output power supply. Input is 100-264VAC via IEC connector.

Sales Codes

Standards Compliance

IEEE802.3 10BASE-T
 IEEE802.3u 100BASE-TX
 IEEE802.3x Flow Control and Back pressure

Connector & Interface

Copper	RJ45, CAT-5 (10/100Mbps) Twisted pair cable auto MDI/MDI-X and auto-negotiation support
Fibre	LC, SFP Hot pluggable

Optical

Optical budget (dB)	20dB (up to 37dB available)
Range on 50 or 62.5/125um multimode fibre (Km)	4 typical*
Range on 9/125um singlemode fibre (Km)	60 (>120Km available**)
Connector	LC
Wavelength (nm)	1310/1550nm

Environmental

Operating temperature	-10 °C to +70 °C
Storage temperature	-40 °C to +74 °C
Humidity	5% ~ 95%, non-condensing

Mechanical

Dimensions	6HP x 4U x 167mm
------------	------------------

Power requirements

Power	+12VDC @ 150mA
-------	----------------

MTBF

Duration	>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

* 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.



Issue 1 16/09/09

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

COE Limited · Photon House · Percy Street · Leeds LS12 1EG

Tel:+ 44 113 230 8800 · Fax:+ 44 113 279 9229

DDI: + 44 113 230 8801 · Email: sales@oe.co.uk

www.coe.co.uk

Asia Tel: + 65 6325 6018 · Fax: + 65 6223 0372

