

FIBER OPTIC ETHERNET CONVERTER SET WITH CASING 7891

High-speed network feedthrough for shielded rooms, maintaining full EMI/RFI protection while enabling reliable 10/100/1000 Mbit Ethernet connectivity.



This fiber optic Ethernet converter set with casing is specially designed as a secure, high performance network feedthrough for EMI/RFI shielded environments. By converting copper Ethernet signals to fiber optics, it provides a fully galvanically isolated connection between your external network and the equipment inside a shielded enclosure. The set is used to convert a 10/100/1000 Base-T signal to a 10/100/1000 optical signal. If mounted on the outside the Faraday cage it maintains over 140 dB of room attenuation.

In this setup, the Local extender is mounted outside the cage, while the Remote extender is installed inside it, with only a fiber optic cable passing through the wall or feedthrough. This design ensures that no conductive copper lines penetrate the shielding barrier, drastically reducing the risk of electromagnetic interference, ground loops, and unintended signal leakage.

The converter set with casing is ideal for use in EMI/RFI shielded rooms, TEMPEST and SCIF environments, secure communication spaces, and research laboratories where data integrity and electromagnetic compatibility are critical.

TYPICAL APPLICATIONS

- Shielded test rooms, TEMPEST and SCIF facilities requiring secure, dependable Ethernet connectivity without compromising shielding performance.
- Forensic labs, high-security areas and development departments where interference-free measurements and secure network access inside a shielded room are essential.

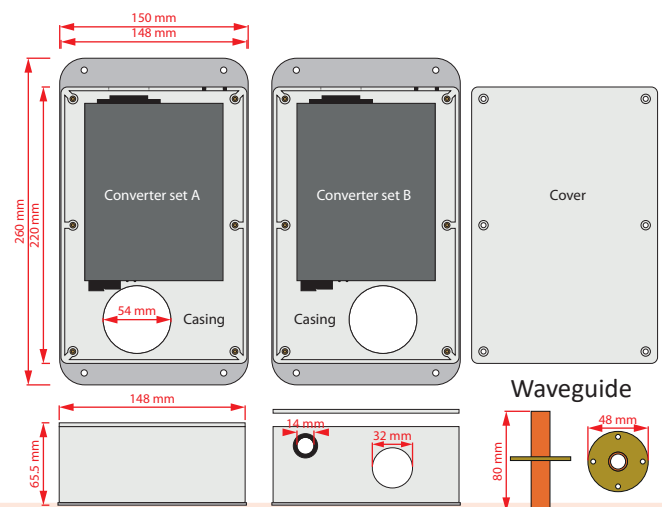
FEATURES

- Auto negotiation function allows UTP ports to auto select 10/100/1000M and Full Duplex or Half Duplex.
- UTP port supports MDI / MDI-X auto crossover.
- Supporting the max 1536 byte Ethernet packet
- Supporting flow control
- Adopting internal power supply

SPECIFICATIONS

Operating standards	IEEE802.3z/AB 1000Base-T, 1000Base-SX/LX
MAC address table	4K
Data Buffer	256K
Connector	UTP: RJ-45, 10/100/1000Mbps Fiber: SC, 1000Mbps
Cable	UTP: Cat 5e or Cat 6 Fiber (singlemode): 8.3/125, 8.7/125, 9/125µm
Flow Control	Full Duplex: IEEE802.3x flow control Half Duplex: back pressure flow control
Power	AC110-240V to DCSV
Ambient temperature	0 - 50 °C
Storage temperature	-40 - 70°C
Humidity	5% - 90%
Dimensions	Mounting plate: 260 x 150 x 2 mm Case: 220 x 148 x 65,5 mm

TECHNICAL DRAWING



ORDER EXAMPLE

Series

7891