

1000Base-T to Fiber Ethernet Media Converter

Model TC3301

- 1000Base-T to Fiber Conversion
- Multimode or Single Mode (850/1300/1550nm)
- One Fiber Bi-Directional Communication (optional)
- Distances up to 100Km
- Built-In Power Redundancy
- Local Dry Contact Alarm Relay
- Hardened Temperature version exceeds NEMA & CALTRANS specs
- Rackmount or Standalone



TC3301S Standalone Unit



1 x TC3301R (Housed in TCRM192 19" Wide, 4U High Rackmount Card Cage)

Featuring an "Industrial-Hardened" version for extreme environments, the TC3301 Gigabit Ethernet Fiber Optic Converter supports distances up to 100km and is available with an option for one fiber bi-directional communication.

The TC3301 is IEEE802.3z/AB 1000Base-T, SX and LX compliant. It converts or connects 1000Base-T unshielded twisted-pair devices (e.g. network bridges, switches, or workstation cards) to single mode (1300/1550nm) or multimode (850/1300nm) fiber optics.

Completely transparent to the network, the TC3301R/S is ideal for integrating UTP and fiber optics in any Ethernet, Fast Ethernet and Gigabit Ethernet network. It is designed with modern Field Programmable Gate Array (FPGA) technology and operates efficiently even during high-demand traffic loads.

It is available in three temperature versions: -10°C to 50°C; -20°C to 70°C; and, a fully Industrial-Hardened version that supports ranges from -40°C to 80°C. The Industrial-Hardened version exceeds all pertinent Utility and Traffic Control environmental and temperature specifications.

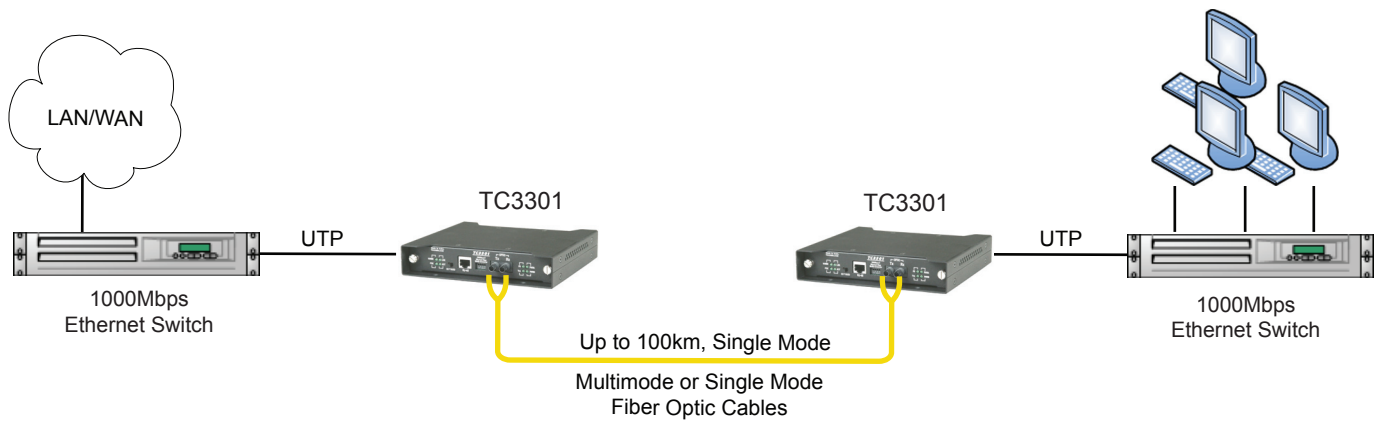
Diagnostics include eight LEDs for Ethernet settings and Ethernet/Power status. Dry contact alarms are provided for connection to remote network management systems. It is available standalone or rack mount. The TC3301S is the standalone/wallmount unit. The TC3301R rackmount version fits into the Model TCRM192 or TCRM196 19" rackmount card cages.

Fiber optic connectors are ST, SC, or FC. The UTP connector is RJ-45 female. Power is 12VDC @ 300mA (standard); optional power sources include 24VDC, -48VDC, 125VDC, or 115/230VAC with an external power cube.

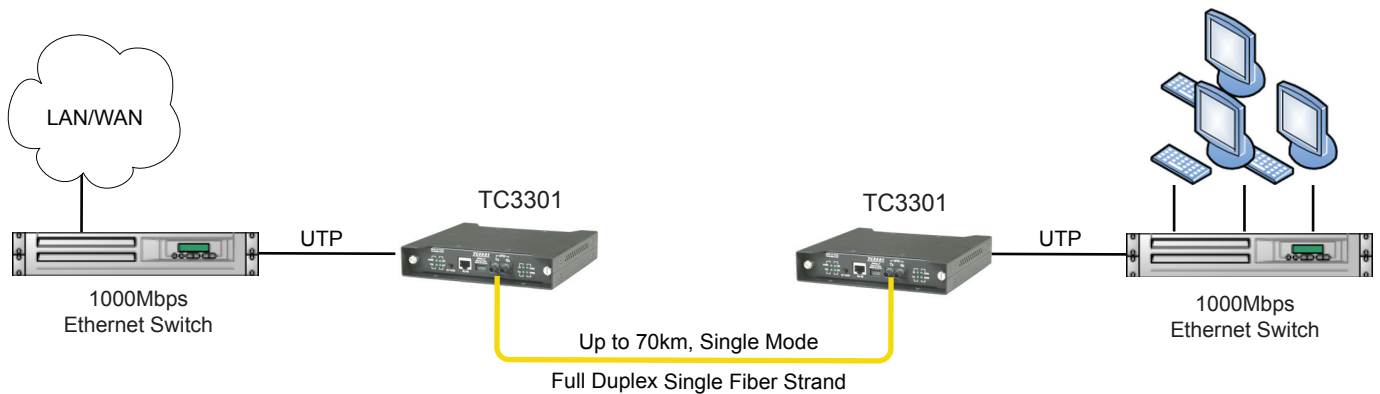


The TC3301 is typically used to interconnect 1000Mbps switching hubs, switches, workstations or any other Ethernet compliant device at distances up to 100km.

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Typical application using TC3301s to extend a Gigabit Ethernet link between two Switches



Typical application using TC3301s to extend a Gigabit Ethernet link via a "one fiber, bi-directional" communication

Data Rates

1000Mbps

Optical

Transmitter.....ELED/LASER*
 Receiver.....PIN Diode
 Interface

.....1000Base-SX, 1000Base-LX
 Wavelength

.....850/1300nm Multimode
1300/1550nm Single Mode

Fiber Optic Connectors
ST, FC, SC**

Loss Budgets*

Multimode @62.5/125µm.....12dB

Single Mode @9/125µm.....20dB

Electrical

ConnectorRJ45 Female
 Interface.....1000Base-T

System

Bit Error Rate.....1 in 10¹⁰ or better

Visual Indicators

PWR A, PWR B, FO, Vcc, 1000M,
 FDX, LNK, ACT

Alarm

Dry Contact.....Normal OPEN

Power

Standard12VDC @300mA

Optional24, -48,125 VDC
 or 115/230VAC (w/ ext power cube)

Temperature

Operating-10°C to 50°C

Hi-Temp (option).....-20°C to 70°C

Extreme Temp (option).-40°C to 80°C

Storage-40°C to 90°C

Humidity95% non-condensing

Physical (Standalone Unit)

Height.....(3.53 cm) 1.39"

Width.....(18.13 cm) 7.14"

Depth.....(16.59 cm) 6.53"

Weight.....(544 gm) 1.2 lbs

*Contact factory for higher requirements

**Contact factory for availability



ISO 9001
 QMI-SAI Global
 #1045959

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Note - Information contained in this data sheet is subject to change without prior notice.