

10Base-T to Fiber Media Converter

TC3105 Series

- Link Distances Up To 80km*
- Hardened Temperature Version
- Multimode or Single Mode (850/1300/1550nm)
- Two-way One Fiber Communication (optional - TC3105R/S only)
- Power/Network LED Status Indicators
- Automatic UTP Polarity Correction
- Slide Switch for UTP Uplink or Downlink
- Standalone, Wall Mount or Rackmount



TC3105 (micro size)



TC3105S



TC3105R (Housed in TCRM192 19" Rackmount Card Cage)

The TC3105 Series 10Base-T to Fiber Converters replace or extend 10Base-T segments with multimode (850/1300nm) or single mode (1300/1550nm) fiber optic cable. All versions are fully compliant with IEEE 802.3 10Base-T standards. The TC3105R is the rackmount card that can be housed by either TCRM192 or TCRM196 19" rackmount card cages. The TC3105S is the standalone/wallmount unit. The TC3105 is packaged in a compact (0.9" x 4.0" x 3.1") sheet metal case.

Specifically designed for long distances, the TC3105 Series can extend LAN segments up to 80km*, depending on fiber size, quality, wavelength and connectors. The standard optical loss budget is 15dB*. Features include automatic UTP Polarity Correction, a slide switch for UTP uplinks or downlinks and LED indicators to aid installation and troubleshooting procedures:

"PWR A"	DC Power Supply Indicator, Power A
"PWR B"	DC Power Supply Indicator, Power B
"VCC"	VCC Voltage Indicator - <i>TC3105R/S only</i>
"PODIS"	Polarity Status Indicator
"LTF"	Link Test Fine (UTP Signal) Indicator
"OP"	Optical Reception Indicator
"TP"	UTP (ETHERNET) Activity Indicator
"LMON"	Optical Link Monitor

The TC3105 Series works with all popular sizes of single mode and multimode fiber optic cable. Fiber optic connectors are ST, FC or SC. Electrical connector is RJ-45 Female. Power is 12VDC or 115/230VAC with an external power cube. A hardened temperature version (-20°C to 70°C), Model TC3105T or TC3105H (micro size), is also available.

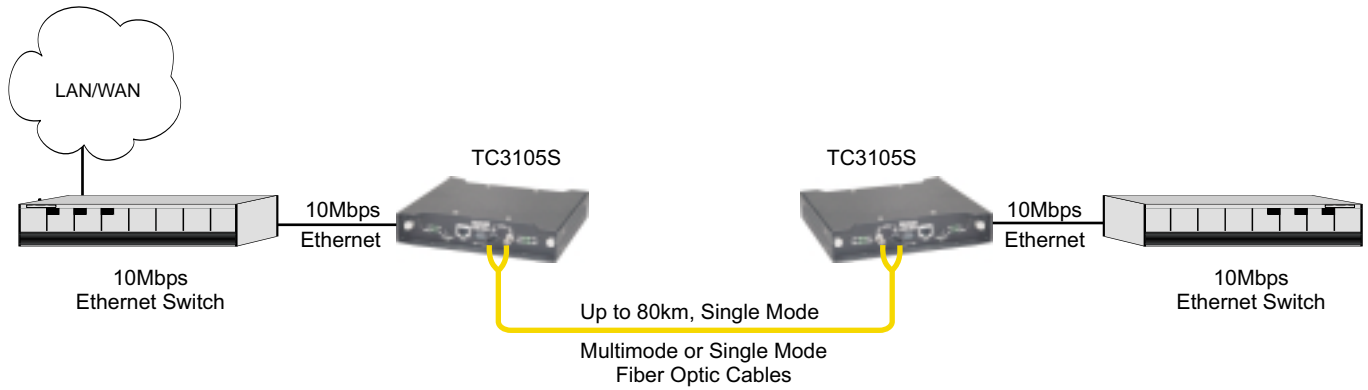
*Contact factory for higher requirements



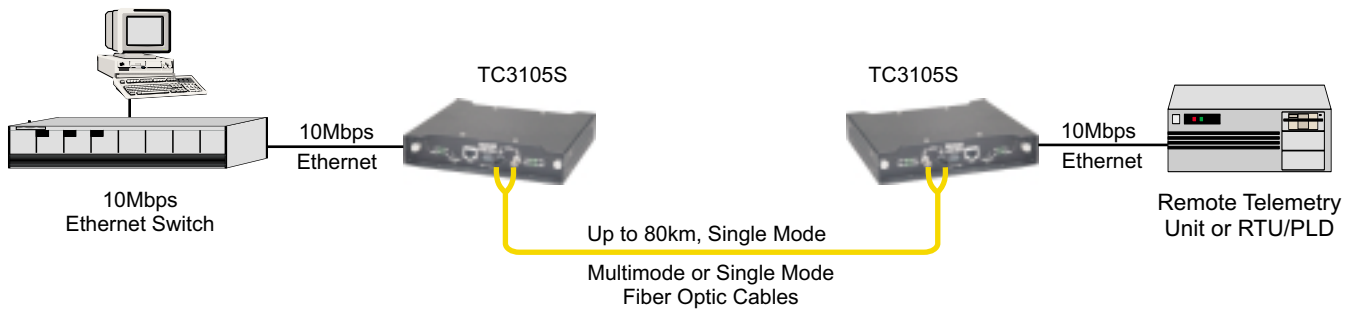
Applications

The TC3105 Series UTP-to-Fiber Optic Converters are frequently used to extend or connect Ethernet segments up to 80km*. Typical applications include linking Ethernet Switches or Workstations.

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Typical Application Using TC3105S to Interconnect Ethernet Switches



Typical Application Using TC3105S to Interconnect Ethernet Switch and Remote Terminal Units

Data Rates

.....up to 10 Mbps

Optical

Transmitter.....LED/ELED

Receiver.....PIN Diode

Wavelength

.....850/1300nm Multimode

.....1300/1550nm Single Mode

Fiber Optic Connectors.....ST or FC

.....Optional SC

Loss Budget* - 850/1300/1550nm

Multimode @62.5/125µm15dB

Single Mode @9/125µm20dB

One Fiber (SM only)20dB

Electrical

Connector(UTP) RJ45 Female

Visual Indicators

Power Status....PWRA, PWRB & VCC

UTP Signal Status.....PODIS, TP, LTF

Optic Signal Status.....OP, LMON

System

Bit Error Rate.....1 in 10⁹ or better

Power

TC3105S.....12VDC @400mA (max)

TC3105.....12VDC @250mA (max)

Optional**24, -48, 125VDC

115/230VAC w/ ext. power cube

Temperature

Operating.....0°C to 50°C

Hi-Temp (optional).....-20°C to 70°C

Storage.....-40°C to 90°C

Humidity95% non-condensing

Physical (TC3105S)

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

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

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

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

Physical (TC3105)

Height.....(2.24 cm) 0.88"

Width.....(10.05 cm) 3.96"

Depth.....(4.40 cm) 1.73"

Weight.....(95 gm) 3.35 oz

*Contact factory for higher requirements

**Available on TC3105R/S only



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