

"MAXI" Fiber Optic Mode Converter/Repeater

Model
TC3005

- Converts Multimode to Single Mode (and vice versa)
- Data Rates up to 200 Mbps
- Distances up to 100km
- Local & Remote Loopback
- Local Dry Contact Alarm Relay
- Test Signal Generator
- 8 Diagnostic LED Indicators
- Built-In Audible Alarm Buzzer
- Built-In Redundant Power Supply
- Standalone or Rackmount (Interchangeable)



The TC3005 "MAXI" Multimode-to-Single Mode Fiber Optic Converter converts multimode formats to single mode formats, or vice versa, for data transmission up to 200 Mbps. Transmission distances to more than 100km are possible with the Laser 1550nm option (34dB loss budget).

The MAXI will convert or repeat all popular wavelengths including 850nm, 1300nm or 1550nm over single mode or multimode fiber optic cable. It is compatible with most communication technologies including Ethernet, Token Ring, TAXI, OC1/OC3, ATM, FDDI and SONET.

The MAXI provides users with several key features including Local & Remote Loopback, a Test Signal Generator, Dry Contact Relay Alarm, Audible Alarm Buzzer, Power Redundancy, and standalone or rackmount modularity.

The Test Signal Generator and Dry Contact Alarm are particularly beneficial. The Signal Generator (160 Mbps) helps technicians conduct various installation tests including fiber link verifications. The Dry Contact Alarm Relay, which includes an audible alarm buzzer, identifies Optical Signal Loss on either the multimode or single mode ends.

Power redundancy is load sharing and switches over automatically in the event of a failure. Power can be either 12VDC (standard), 24VDC, -48VDC, or 115/230VAC with an external power cube. Standalone versions are modular, i.e. used either in a standalone case or in a rack mount assembly. Standard connectors are ST or FC type.

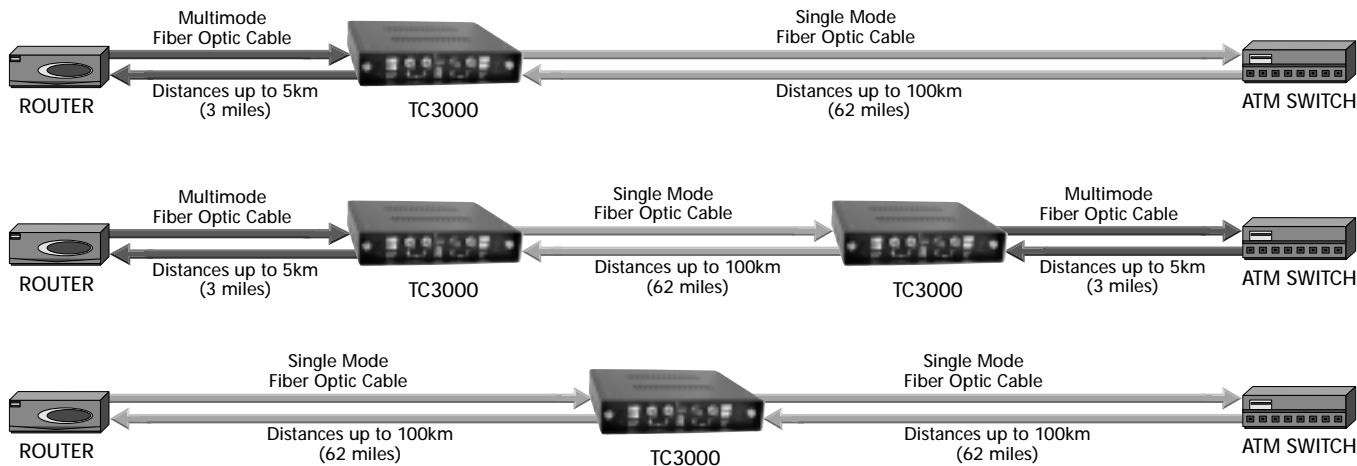
Four DIP switches and eight LED indicators are provided to help installation and troubleshooting. An extreme temperature version (-20° to 70°C), Model TC3005T, is also available.



Applications

The MAXI Mode Converter is used to convert multimode to single mode, or vice versa, in a variety of LAN and Telephony communication environments including PABX, Ethernet, Token Ring, FDDI, ATM & SONET (OC1 & OC3). This conversion is done to cross-connect different fiber types, regenerate optical signals and/or extend transmission distances.

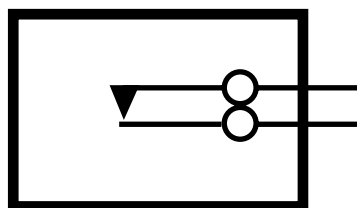
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Typical applications using Model TC3000 "MAXI" mode converter/repeater

Reply Switch Specifications:

Maximum Switch Voltage: 100VDC
 Switch Current: 0.5 Amp
 Maximum Carry Current: 1.2 Amp
 Contact Resistance: 0.2 Ohm



to
 Remote
 Alarm Status
 Indicator

Dry Contact Alarm Relay Switch

A terminal block connector on the rear panel provides for the dry contact relay alarm. Normally in the OPEN position, any loss of electrical or optical signal will trigger an alarm condition and force the switch to the CLOSED position. This relay can be used in conjunction with an external device to monitor the condition of the link.

Data Rates

.....up to 200 Mbps

Optical

Transmitter.....LED/ELED/LASER

ReceiverPIN Diode

Wavelength

.....850/1300nm Multimode

.....1300/1550nm Single Mode

Fiber Optic ConnectorsST

{trademark of AT&T}; Optional FC

Loss Budgets*

LED16dB 850/1300nm

Multimode @62.5/125µm

ELED16dB 1300/1550nm

Single Mode @9/125µm

LASER25dB 1300nm

Single Mode @9/125µm

HI-PWR LASER ...34dB 1300/1550nm

Single Mode @9/125µm

*Any two wavelengths are available on each unit

System

Bit Error Rate1 in 10¹⁰ or better

Visual Indicators

.....PWRA, PWRB, VCCA, VCCB,

...MM RX, MM TX, SM RX, SM TX

Alarm

Dry Contact.....Normal OPEN

Power

Standard.....12VDC @700mA (max)

Optional.....24VDC, -48VDC, or

.....115/230VAC with power cube

Temperature

Operating.....-10°C to 50°C

Hi-Temp (optional)-20°C to 70°C

Storage.....-40°C to 90°C

Humidity.....95% non-condensing

Physical (Standalone Unit)

Height(3.53 cm) 1.4"

Width(18.14 cm) 7.1"

Depth(16.57 cm) 6.5"

Weight(544 gm) 1.2 lbs



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