

Switching/Bridging Ethernet Fiber Media Converter w/ Rate Control

Model
TC3220

- Bandwidth Control (32K Increments)
- Web-Based, Telnet or Serial Configuration
- Hardened Temperature version exceeds NEMA & CALTRANS specs
- Distances up to 100Km
- 10/100 Auto-Negotiating
- Multimode or Single Mode (1300/1550nm)
- Two-way One Fiber Communication (optional)
- Built-In Power Redundancy
- Local Dry Contact Alarm Relay
- Rackmount or Standalone



TC3220S Standalone Unit



TC3220R (Housed in TCRM192 19" Wide, 4U High Rackmount Card Cage)

Featuring Bandwidth Control, the Model TC3220 10/100M 2-port Switching/Bridging Fiber Optic Ethernet Media Converter converts or connects 10/100Base-TX (UTP) networks to 100Base-FX (Fiber Optic) networks.

Bandwidth Control gives users, especially data service providers, the ability to control or limit bandwidth. Data rates for Bandwidth Control can be set at 32Kb increments, i.e. 32K, 64K, 96K...to 100Mb. It can be managed through any Web Browser, Telnet or Serial Console. Password protection is provided.

The TC3220 includes a built-in switch that enables distances up to 100km without additional hardware (e.g. Switch or Router). It provides 10/100Mbps Auto-Negotiation and automatically adapts to full or half-duplex mode. Transparent to the network, it operates effectively even during high-demand traffic loads.

Standard temperature range is -10°C to 50°C. The optional high temperature version provides a range of -20°C to 70°C. A hardened temperature version is also available and provides a range of -40°C to 80°C which exceeds NEMA and CALTRANS specifications.

The TC3220 supports single mode distances up to 100 km (1550nm laser) and works with all types and sizes of fiber optic cable. A two-way "one fiber" single mode version is available. Fiber optic connectors are ST, FC or SC. The UTP connector is RJ-45 Female.

Dry contact alarms are provided for connection to remote network management systems. A local loopback feature, eight LED indicators and an Uplink/Downlink slide switch are provided on the front panel to assist with installation and troubleshooting.

Standard power is 12VDC and includes built-in redundancy. Optional power sources include 24VDC, -48VDC, 125VDC or 115/230VAC with an external power cube. It is available standalone or rack mount (up to 10 cards per Rack Assembly).



Applications

The TC3220 is frequently used by Data Service Providers to control the bandwidth they offer to customers. It is also used for its ability to transmit over long distances (100km or farther) without connecting to additional hardware, e.g. a Switch or a Router. The Hardened Temperature option enables it to be used in extreme environments.

TC Communications, Inc.

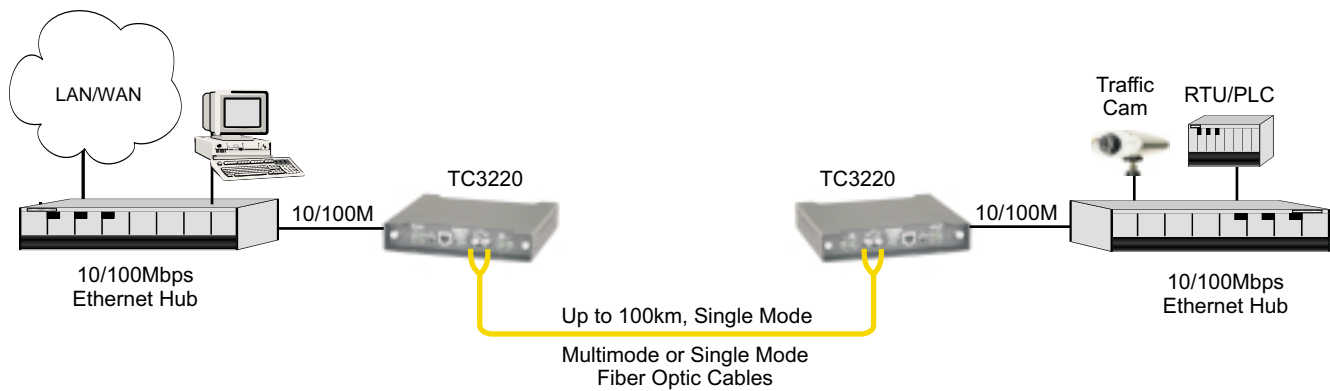
17575 Cartwright Rd. Irvine, CA 92614 U.S.A.

Tel: (949) 852-1972, Fax: (949) 852-1948

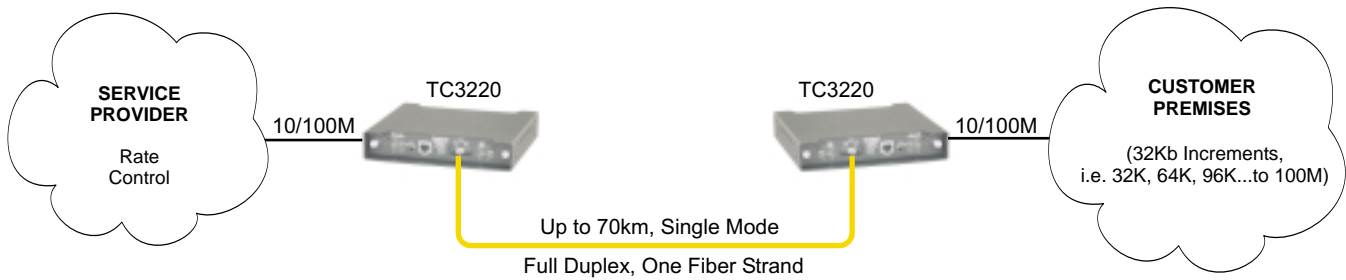
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Typical application using TC3220s to extend a Fast Ethernet link between two Hubs



Typical application using TC3220s to extend a Fast Ethernet link via a "One Fiber" strand

Data Rates

.....10/100 Mbps (auto-sensing)
 Control.....32Kb Increments
i.e. 32K, 64K, 96K...to 100M

Optical

Transmitter.....LED/LASER*
 Receiver.....PIN Diode
 Wavelength
1300nm MM
1300/1550nm SM

Fiber Optic Connectors
ST, Optional FC or SC

Loss Budget* - 1300/1550nm
 Multimode @62.5/125µm.....15dB
 Single Mode @9/125µm20dB

Electrical

ConnectorRJ45 Female
 Interface.....10/100Base-T

Visual Indicators

PWR A, PWR B, FO (10M), FO (100M), TP (10M), TP (100M)

System

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

Diagnostic Functions

.....Local Loopback

Alarm

Dry Contact.....Normal OPEN

Power

Standard12VDC @300mA
 Optional24, -48, 125VDC or 115/230VAC (w/ external cube)

Temperature

Operating-10°C to 50°C
 Hi-Temp (optional).....-20°C to 70°C
 Hardened (optional) ...-40°C to 80°C
 Storage-40°C to 90°C
 Humidity95% non-condensing

Physical

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



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