

Ethernet-over-T1/E1 Multiplexer

TC8619

- **Fast Ethernet Transport over Framed T1 or E1**
- **IEEE 802.1p QoS with Four Queues**
- **Strict or Weighted Round Robin Priority Scheduling**
- **Extreme Temp (-40°C to +80°C) Optional**
- **Built-in Power Redundancy**
- **Meets or Exceeds IEC 61850-3, IEEE1613 & NEMA TS-2 Standards**
- **Member of the Mini Channel Bank Product Family**



The TC8619 Ethernet-over-T1/E1 Gateway allows the user to extend Ethernet backhaul applications to remote locations over existing TDM Telecom infrastructure. It converts the Ethernet data into framed T1/E1 format for transmission over T1/E1 links, and the modules are used in pairs.

The TC8619 performs store-and-forward of frames with Ethernet traffic conditioning and bridging functions at wire speed, fully utilizing the TDM circuit.

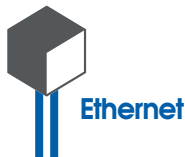
The TC8619 interface card can fit into any available Mini Channel Bank housing option including 1S Standalone chassis and 1U/4U card cages. Power Redundancy is standard and power supply options available for standalone version are 90-260VAC, 12VDC, 24VDC and -48VDC. Standard operating temperature is -10°C to +50°C, high temp version is -20°C to +70°C, and the extreme temperature version is -40°C to +80°C.



Applications

- Bridging Ethernet LANs over Existing T1/E1 Telecom Network
- Extending Ethernet Networks by Utilizing TDM Telecom Infrastructure (i.e. T1/E1 Landline, or T1/E1s/PDH/SDH Microwave Carrying T1/E1)
- Demarcation Between the Carrier's and Customer's Networks
- Bonded Transparent LAN Service

Ethernet Device



TC8619



Ethernet Device



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Typical Application using TC8619 Ethernet-over-T1/E1 Multiplexer

Electrical

T1 Interface

- Connector Electrical, RJ-48
- Line Termination ... 100Ω, balanced
- Data Rate 1.544Mbps
- Line Code AMI, B8ZS

E1 Interface

- Connector Electrical, RJ-48
- Line Termination .. 120Ω, balanced,
.....
75Ω, unbalanced via RJ-48
.....to BNC adapter cable
- Data Rate 2.048Mbps
- Line Code AMI, HDB3

Ethernet Interface

- Connector Electrical, RJ-45
- Type 10/100Base-T
- Compliance IEEE 802.3

System

- Bit Error Rate 1 in 10⁹ or Better

Regulatory Approval

- CE, FCC Part 15, CISPR (EN55022)
- CLASS A, IEC 61850-3, IEEE 1613,
- NEMA TS-2

LEDs

- ALM, D (Duplex), L (Link), PWR A,
PWR B, Vcc, LOS, RAI, AIS, BPV, CRC,
SYNC

Power

- Standard 12VDC
- Optional 24, -48 VDC
..... 90-260 VAC, 50/60Hz
- Power Consumption <10W

Operating Temperature

- Standard Temp -10°C to 50°C
- High Temp (opt.) -20°C to 70°C
- Extreme Temp (opt.) -40°C to 80°C

Storage

- Temperature -40°C to 90°C
- Humidity 95% non-condensing

Physical (Standalone Unit)

- Height (3.53 cm) 1.40"
- Width (18.14 cm) 7.20"
- Depth (24.89 cm) 9.80"
- Weight (907 g) 2.0 lbs



TC Communications, Inc.
17881 Cartwright Road
Irvine, CA 92614 U.S.A.
Factory Tel: (949) 852-1972
Fax: (949) 852-1948

Web Site: www.tccomm.com

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



TC Communications Quality Management System is certified as being in conformity with ISO 9001:2015 by Intertek



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