

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.

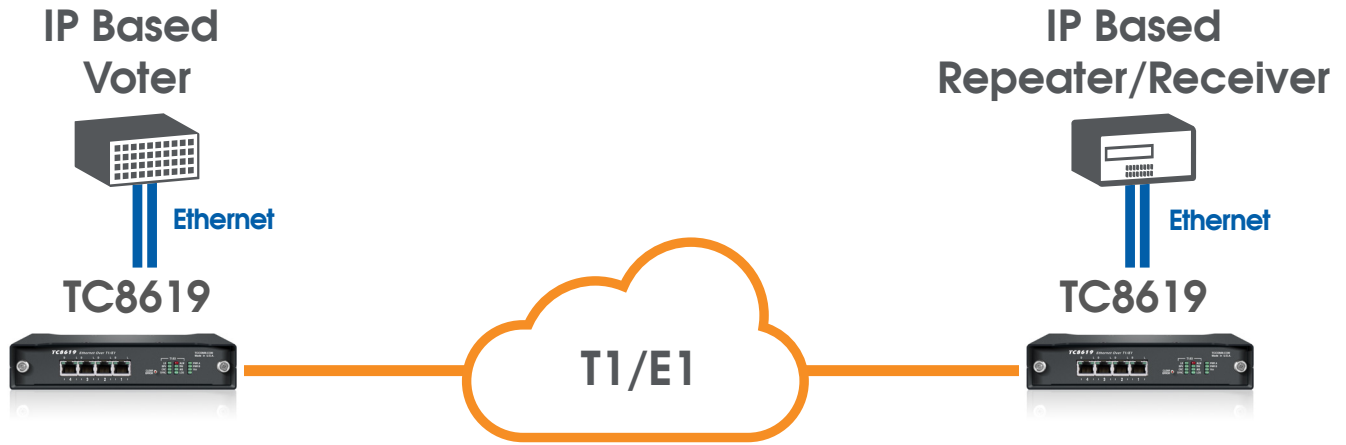
The TC8619 performs store-and-forward of frames with Ethernet traffic conditioning and bridging functions at wire speed, fully utilizing the TDM circuit.

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 -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



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,
to BNC adapter cable
 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

High Temp -20°C to 70°C
 Extreme Temp -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



SAI GLOBAL
 ISO 9001
 Quality

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

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