

4 Channel Voice-over-T1/ E1 Multiplexer

TC8618-1/2

- 4-ch. FXS (TC8618-1) or 4-ch. FXO (TC8618-2)
- Mux 4 ch. 2-Wire Telephone/Fax/Modem over T1/E1
- ESF Framing Support for T1
- PCM31C Framing Support for E1
- Dialing/Paging between FXS (TC8618-1) units
- Very Low Latency
- Built-in Power Redundancy
- Rack Mount or Stand Alone



TC8618-1 Front Panel



TC8618-1 Rear Panel



TC8618-2 Front Panel



TC8618-2 Rear Panel

The TC8618 is a 4-channel Voice/Fax/Modem over T1/E1 Multiplexer that allows network managers the flexibility of leveraging T1/E1 circuits by adding low cost analog as needed. Dialing and paging between TC8618-1 (FXS) units is supported, providing customers flexibility for voice calls. The device is economical, simple to install and comes standard with built-in power redundancy.

The TC8618 is available in two configurations:

- 4-Channel FXS (TC8618-1)
- 4-Channel FXO (TC8618-2)

The device requires no additional equipment for T1/E1 link and device verification. Extensive diagnostics are available to quickly identify issues with your FXS/FXO or digital lines. Three different types of loopbacks: local, remote, and T1/E1 loopback assist in isolating whether an issue lies on your FXS/FXO line or your T1/E1 line. CSU Loop Code Up/Down is also supported. Each unit provides Ring/Hook LEDs for verifying signals on each FXS/FXO channel, Power LEDs for verifying power inputs, Alarm LEDs for verifying T1/E1 signal, and a Remote LED to monitor the remote unit.

All products part of the Mini Channel Bank series are equipped with the "R2" button. The "R2" button, was developed to isolate causes of disruptions, leveraging the Alarm LEDs and allows users to clear the history on the local unit and mirror and reset the Alarm LEDs on the remote unit. Each of the Alarm LEDs have the ability to show current T1/E1 errors and a history of up to 3 errors.

The TC8618 is compatible with copper line lengths up to 6000ft for 100Ω T1 and up to 2.5km 75Ω / 120Ω E1. The T1/E1 uses a RJ48 connector and the analog uses RJ-11 connectors. Optional BNC adapter cable is available for 75 Ohm E1. Power is 12VDC standard or optional 24VDC, -48VDC, 125VDC, or 115/230VAC with an external power cube. A high temperature version (-20°C to 70°C) and extreme temperature version (-40°C to 80°C) are also available.

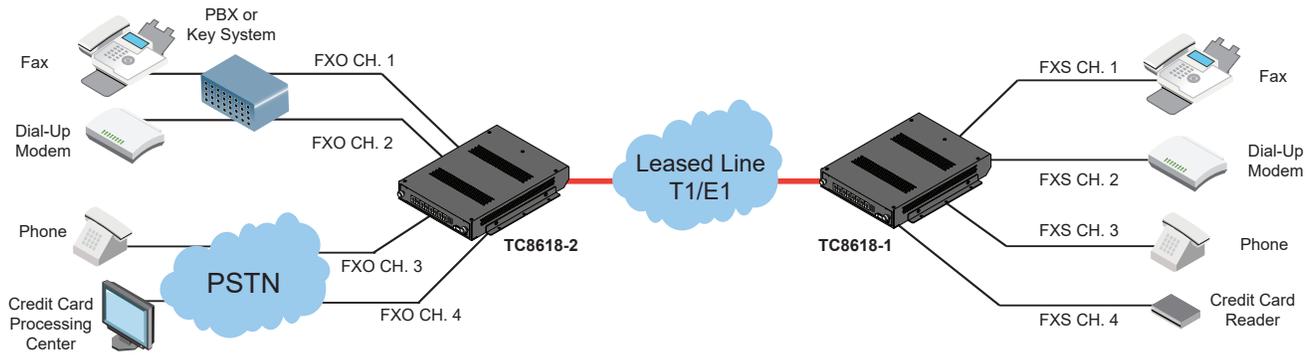


Applications

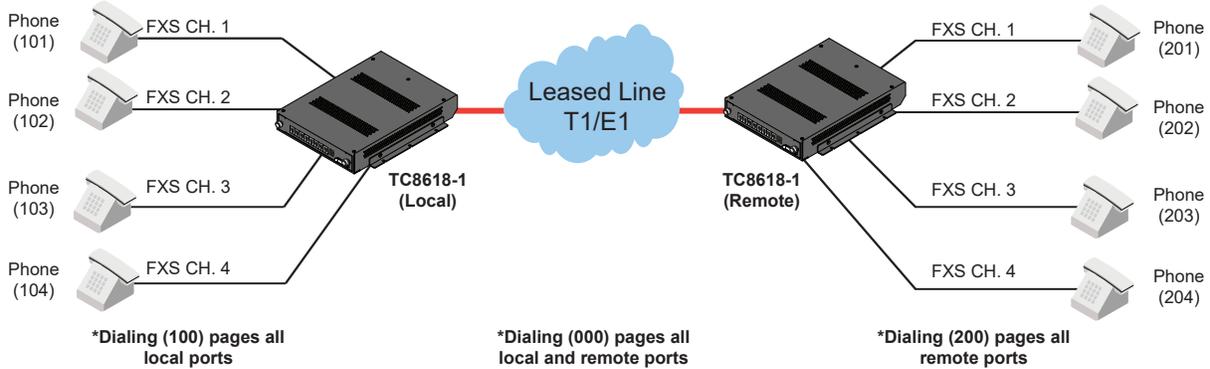
A low cost and immediate solution, the TC8618 is typically used to link analog telephones or legacy dial-up devices including data modems, fax machines, meters, ATM, and credit card machines over T1/E1.

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Typical Application using the TC8618 Voice/Fax-over-T1/E1



TC8618-1 with Dialing/Paging Option

Interfaces

TC8618-1.....4x FXS
 TC8618-2.....4x FXO

Connection Capacity

600Ω (2-Wire).....4 Ports

T1/E1

T1
 Standard.....G.703
 Impedance.....100 Ω
 Receiver sensitivity.....0dB to -36dB
 Line Code.....AMI / B8ZS
 Framing.....ESF (Only)

E1
 Standard.....G.703
 Impedance.....120 Ω
or 75 Ω with BNC adapter
 Receiver sensitivity.....0dB to -43dB
 Line Code.....AMI / HDB3
 Framing.....PCM31C

Electrical

Analog interface
 Impedance 600Ω
 Max Input 3Vp-p
 Frequency band..... 300 to 3400Hz
 ConnectorRJ-11

Visual Indicators

Channel StatusRing, Hook
 System..PWR A, PWR B, Vcc, ALM, RMT
 T1/E1.....AMI,RAI, AIS, CRC
BPV, LOS, SYNC

System

Bit Error Rate.....1 in 10⁹ or better

Alarm

Dry Contact.....Normal Open/Closed

Power

Standard.....
12VDC@ 1A (12W) for TC8618-1
12VDC@500mA (6W) for TC8618-2
 Optional....24VDC, -48VDC, 125VDC,
or 115/230VAC w/ power cube

Temperature

Operating.....-10°C to 50°C
 Hi-Temp (optional).....-20°C to 70°C
 Extreme (optional).....-40°C to 80°C
 Storage.....-40°C to 90°C
 Humidity.....95% non-condensing

Physical (Standalone Unit)

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



SAI GLOBAL
 ISO 9001
 Quality

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