

# T1/E1 Redundancy Card

## TC8630-1

- ESF Framing Support for T1
- PCM31C Framing Support for E1
- Built-in Power Redundancy
- 1U Rack Mount
- Diagnostic DIP Switches for T1/E1 Loopback Tests
- 12VDC, 24VDC, -48VDC, 125VDC
- LEDs for T1/E1 signal status



TC8630-1 in 1U Chassis (Left Front)



TC8630-1 in 1U Chassis (Rear)

The TC8630-1 is a T1/E1 Redundancy Card that allows network managers the flexibility of leveraging their existing T1/E1 circuits by adding backup T1/E1 link as needed. It is economical, simple to install and comes standard with built-in power redundancy.

Diagnostics are extensive and also provides multiple LEDs for Alarm, Power, Vcc, and T1/E1 status.

The built-in Sync mechanism verifies both device and T1/E1 link operation. No other test equipment is required for link and device verification.

The TC8630-1 is compatible with standard 100Ω T1 for copper line lengths up to 3000ft and up to 2.5km for 75Ω / 120Ω E1 (copper line length is the distance between the TC8630-1 and the T1/E1 cross-connect). The T1/E1 uses a RJ-48F connector and the analog and dry contact channels use 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. Optionally, a high temperature version (-20°C to 70°C) and extreme temperature version (-40°C to 80°C) are also available.

TC8630-1 is a modular card. It can be plugged into the following chassis:

- 1U: TC8630-1 can add T1/E1 redundancy support for other interface card.



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## T1/E1

### T1

Connector .....RJ-48F  
Receiver sensitivity .....0dB to -36 dB  
Line Code ..... AMI / B8ZS  
Framing..... ESF (Only)

### E1

Connector .....RJ-48F  
Receiver sensitivity .....0dB to -43 dB  
Line Code ..... AMI / HDB3  
Framing..... PCM31C

## Electrical

### Dry Contact Interface

Normal open ..... standard  
Normal close ..... optional  
Load Voltage (peak AC) ..... 60V  
Load Voltage (DC) ..... 60V  
Continuous load current ..... 0.55A  
Peak load current ..... 1.2A  
Max On Resistance ..... 2.5  $\Omega$   
Output Capacitance ..... 150pF

## Visual Indicators

System ..... PWR A, PWR B, Vcc, ALM, RMT  
T1/E1 ..... AMI, RAI, AIS, CRC, BPV, LOS, SYNC, In-Use

## System

Bit Error Rate ..... 1 in 10<sup>9</sup> or better

## Alarm

Dry Contact ..... NormalOpen/Closed

## Power

Standard ..... 12VDC @500mA MAX  
Optional ..... 24VDC, -48VDC, 125VDC, or 100-240VAC

## 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 (1U Rackmount)

Height ..... (4.3cm) 1.7"  
Width ..... (48.3cm) 19"  
Depth ..... (26.7cm) 10.5"



 SAI GLOBAL  
ISO 9001  
Quality

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