

# T1/E1 Redundancy Controller

# TC8611

- **1+1 Redundancy over Primary and Secondary T1/E1 lines**
- **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**



TC8611 T1/E1 Redundancy Controller

**T**he TC8611 T1/E1 Redundancy Controller adds 1+1 redundancy for an existing TDM Telecom infrastructure. It duplicates the incoming host T1/E1 signal and transmits the signal over the primary and secondary T1/E1 lines. Receiving on the primary and secondary lines, the TC8611 decides which T1/E1 signal between the two lines to transmit out to the host T1/E1.

TC8611 can be used along with TC3845-1 T1/E1-over-IP Gateway to allow one path to be over an Ethernet network while the other over a normal TDM connection.

The TC8611 interface card can fit into any available Mini Channel Bank housing option including 1S Standalone chassis and 1U/4U card cages.

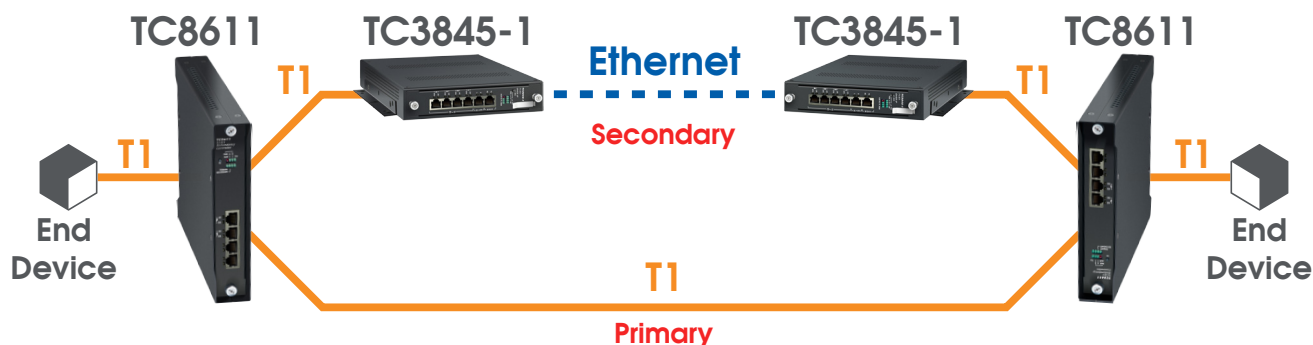
Power Redundancy is standard and power supply options available for standalone version are 90-260VAC, 12VDC, 24VDC and -48VDC. Standard operating temperature is -20°C to +70°C and the extreme temperature version is -40°C to +80°C.



## Applications

The TC8611 is designed for networks that need T1 redundancy.

These networks have a primary and redundant secondary line typically used in critical communication applications like public transportation, police and fire, emergency response, and power utilities.



Typical Application using TC8611 T1/E1 Redundancy Controller

## 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

## System

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

## Regulatory Approval

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

## LEDs

ALM, PWR A, PWR B, Vcc, SIG, AIS,  
BPV, LB

## 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



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](http://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

