

2 Ch. 4-Wire E&M Channel Bank

TC8714-2

- Up to 2-ch 600Ω Analog & Dry Contact
- 2-Wire or 4-Wire Analog
- ESF/SF Framing Support for T1
- PCM30/PCM30C Framing Support for E1
- Very Low Latency
- Dry contact detectors with Isolated Ground
- Compatible with all dispatch consoles
- Built-in Power Redundancy
- Rackmount or Standalone
- Extreme temp (-40°C to +80°C) optional



TC8714S Front Panel



TC8714S Rear Panel

The TC8714-2 is a 2-channel 2-/4-Wire E&M Channel Bank that allows network managers the flexibility of leveraging their existing T1/E1 circuits by adding low cost analog or dry contact links as needed. It is economical, simple to install and comes standard with built-in power redundancy.

The device requires no additional equipment for T1/E1 link and device verification. Extensive diagnostics are available to quickly identify issues with your analog or digital lines. Two different types of loopbacks: local and T1/E1 loopback assist in isolating whether an issue lies on your analog line or your T1/E1 line. CSU Loop Code Up/Down is also supported. Each unit provides TX/RX and RLY/DET LEDs for verifying analog signals, Power LEDs for verifying power inputs and Alarm LEDs for verifying T1/E1 signal.

The TC8714-2 is compatible with standard 100Ω T1 and 75Ω / 120Ω E1. The T1/E1 uses a RJ48 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.



Applications

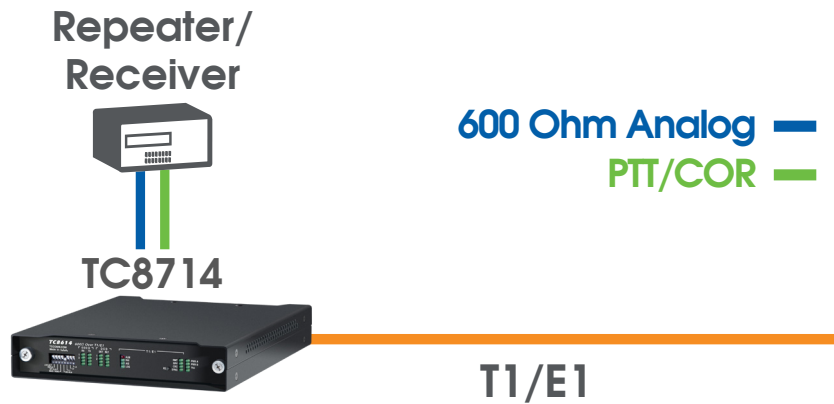
A low cost and immediate solution, the TC8714-2 is typically used to link or extend various 600Ω analog, audio and intercom devices (e.g. FSK modems, E&M, teleprotection relay controllers, etc.), and dry contacts over existing T1/E1 links.

The primary use of the TC8714-2 is for the replacement of existing channel banks.

The TC8714-2 is specifically designed for remote sites with limited connectivity and providing a simple and cost effective solution.

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

Web Site: tcomm.com



Typical Application using the TC8714 600Ω Analog & Dry Contact-over-T1/E1

Connection Capacity

- Analog (2/4 Wire) 2 Ports
- Bi-Directional Dry Contact 2 Ports
- T1/E1 1 Port

Electrical

- Analog interface**
 - Impedance 600Ω
 - Signal range -36.5 to +4.5 dBm
 - Frequency band 300 to 3400Hz
 - Connector RJ11
- Dry Contact Interface**
 - Normal open standard
 - Normal close optional
 - Max Load Voltage 60V
 - Continuous load current 0.55A
 - Peak load current 1.2A
 - Detector max input voltage 9V
 - Connector RJ11
- T1 Interface**
 - Line Code AMI, B8ZS
 - Framing ESF, SF
 - Standards AT&T TR-62411, G.703, G.704, G.824, ANSI T1.403
 - Connector RJ48
 - Impedance 100Ω
- E1 Interface**
 - Line Code AMI, HDB3
 - Framing PCM30, PCM30C
 - Standards G.703, G.704, G.706, G.732, G.823
 - Connector RJ48, BNC
 - Impedance 120Ω, 75Ω

Visual Indicators

- Unit Status PWR A, PWR B, Vcc, ALM
- Analog TX, RX
- Dry Contact RLY, DET
- T1/E1 AMI, RAI, AIS, CRC, BPV, LOS, SYNC

Power

- Standard 12VDC @200mA
- Optional 24VDC, -48VDC, 125VDC, or 100/240VAC 50-60Hz
- Power consumption <10W

Operating Temperature

- Standard -10°C to 50°C
- Hi-Temp (optional) -20°C to 70°C
- Extreme (optional) -40°C to 80°C

Storage

- Temperature -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

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

Sales Office
U.S.A. Domestic & International
(949) 852-1973

Web Site: tccomm.com

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