

# C4TEF10xx-120

## (4) DS1 - T1/E1/J1 Copper to Fiber Transport Mux NID



The C4TEF10xx-120 chassis card provides physical layer status monitoring and alarm classification functions for Telecom operators to manage their fiber optic network and reduce OPEX and maintenance costs.

Copper connections are compatible with G.703 and AMI/B8ZS/ HDB3; while the optical connection will run at 155 Mbps. A hardware-based solution guarantees the constant bit rate of TDM transport without requiring traffic management.

Devices must be used in pairs. Typical installation will include a chassis card installed in the Point System™ locally and a stand-alone device [S4TEF] installed at the remote location.

### Features

- Low cost transport capability: (4) T1/E1/J1
- Target applications of the device include: FTTx, such as Fiber-to-the-Business, Fiber-to-the-Building, Fiber-to-the-MDU and Fiber-to-the-Home; Cell Tower backhaul
- Loopbacks via Test Set
- Automatic Link Restoration
- Remote Management
- Local and Remote Loopback
- AIS/TAOS
- LEDs for each data port
- Settings for line code, line length local loopback or remote Loopback
- T1/E1/J1 mode settings
- Local (AUX) Management Interface
- Access to complete status information on local and remote device
- Field Upgradeable Firmware

### Management Features

- Report local device status
  - Port status
  - Device settings and configuration
- Local command operations include:
  - Loopback Fiber & T1/E1 per channel
  - AIS TX on fiber on loss of copper link & AIS TX on copper on loss of fiber link
- Remote device status:
  - Port Status
  - Device settings & configuration
- Remote Commands:
  - Loopback Fiber & T1/E1 per channel
  - AIS TX on fiber on loss of copper link & AIS TX on copper on loss of fiber link

### Specifications

Standards	Ethernet interface: IEEE 802.3™-2008  TDM interfaces: ANSI T1.102, T1.403 and T1.408 ITU I.431, G.703, G.736, G.775 and G.823 ETSI 300-166, 300-233 and TBR 12/13 AT&T Pub 62411
Switches	Numerous switch settings for line coding, line buildout, loopback (per port), AIS setting
Jumper	Hardware: device mode is determined by Dip switch settings Software: device mode is controlled by the most recently saved, on-board microprocessor settings
Dimensions	Width: 1.72" [44 mm] Depth: 5" [127 mm] Height: 3.4" [86 mm]
Power Consumption	3.6 Watts
Environment	<b>Environment specs are dependent on the chassis chosen</b> Operating: 0°C to 50°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	EN55022 Class A, EN55024, CE mark
Warranty	Lifetime

\*Note: C4TEF cards cannot be used with the 1-Slot Point System™ Chassis.

### Ordering Information

#### C4TEF1011-120

1300nm multimode (ST)  
[2 km/1.2 mi.] Link Budget: 11.0 dB  
to (4) RJ-48 [1.5 km/0.9 mi.]

#### C4TEF1013-120

1300nm multimode (SC)  
[2 km/1.2 mi.] Link Budget: 11.0 dB  
to (4) RJ-48 [1.5 km/0.9 mi.]

#### C4TEF1014-120

1310nm single mode (SC)  
[20 km/12.4 mi.] Link Budget: 16.0 dB  
to (4) RJ-48 [1.5 km/0.9 mi.]

#### \*C4TEF1040-120

1 SFP port (Empty) to (4) RJ-48 [1.5 km/0.9 mi.]

#### \*C4TEF1040-140

2 SFP ports (Empty)  
to (4) RJ-48 [1.5 km/0.9 mi.]

### Single Fiber Products

#### C4TEF1029-120

1310nm TX/1550nm RX single fiber single mode (SC)  
[20 km/12.4 mi.] Link Budget: 19.0 dB  
to (4) RJ-48 [1.5 km/0.9 mi.]

#### C4TEF1029-121

1550nm TX/1310nm RX single fiber single mode (SC) [20 km/12.4 mi.]  
Link Budget: 19.0 dB to  
(4) RJ-48 [1.5 km/0.9 mi.]

\*SFP port uses standard 100Base-x/oc-3 SFP