

# S6010 Series

## T1/E1 to Fiber Network Interface Device



The T1/E1 copper to fiber network interface device (NID) provides a solution for those users that need to extend T1/E1 and PRI connections over fiber.

The T1/E1 supports Small Form Pluggable (SFP) transceivers to support a variety of fiber types, distances and wavelengths to provide maximum flexibility across a variety of network topologies. The use of Coarse Wave Division Multiplexing (CWDM) SFPs can be utilized to further increase the bandwidth capacity of the fiber infrastructure.

The T1/E1NID must be used in pairs. A typical installation will include a chassis card installed in the ION Platform locally and a stand-alone device installed at the remote location.

### Features

- Remote in-band management
- Local or Remote Loopbacks - Copper or Fiber
- Switch selectable for T1 or E1
- Remote firmware upgrade
- LEDs for immediate visual status
- Supports dual or single fiber
- Supports multimode and single mode fiber at a variety of distances
- Supports CWDM SFPs
- SNMP management when used with ION chassis and management module
- Remote standalone can be managed by local peer
- Extend PRI over fiber

### Specifications

Standards	ANSI T1.102, T1.402 and T1.408, ITU I.431, G.703, G.736, G.775 and G.823, ETSI 300-166, 300-233 and TBR12/12
Copper Connectors	RJ-48, BNC
Fiber Connectors	SFP: LC connector Uses standard 100BASE-X/OC-3 SFP Fixed Optics: ST or SC connector
Data Rates	T1 = 1.544 Mbit/s, E1 = 2.048 Mbit/s
Status LED	Power, Signal Detect Copper, Signal Detect Fiber
Dimensions	W: 3.25" [82 mm]; D: 6.5" [165 mm]; H: 1.0" [25 mm]
Power Consumption	2.6 Watts
Power	Input: 100-240 VAC Output: 12 VDC
Operating Temp	-10°C to 65°C
Altitude	0-10,000 Feet
Operating Humidity	5-95% (non-condensing)
Shipping Weight	2.0 lbs. [0.90 kg]
Regulatory Compliance	CISPR/EN55022 Class A; FCC Class A; CE Mark, UL60950
MTBF w/Power Supply	Greater than 41,660 hours (MIL-HDBD-217F) Greater than 114,580 hours (Bellcore)
MTBF w/o Power Supply	Greater than 250,000 hours (MIL-HDBD-217F) Greater than 687,000 hours (Bellcore)
Warranty	Lifetime

### Ordering Information

#### S6010-1011

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

#### S6010-1013

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1300nm multimode (SC)  
[2 km/1.2 mi.] Link Budget: 12.0 dB

#### S6010-1014

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

#### S6010-1015

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1310nm single mode (SC)  
[40 km/24.9 mi.] Link Budget: 29.0 dB

#### S6010-1016

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1310nm single mode (SC)  
[60 km/37.3 mi.] Link Budget: 32.0 dB

#### S6010-1017

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1550nm single mode (SC)  
[80 km/49.7 mi.] Link Budget: 29.0 dB

#### S6010-1040

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to SFP slot (empty)

#### S6010-3040

(2) Coax (BNC) to SFP slot (empty)

### Single Fiber Products

#### Recommended use in pairs

#### S6010-1029-A1

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

#### S6010-1029-A2

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

#### S6010-1029-B1

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1310nm TX /1550nm RX single fiber SM (SC)  
[40 km/24.9 mi.] Link Budget: 25.0 dB

#### S6010-1029-B2

Twisted Pair (RJ-48) [1.5 km/0.9 mi.] to 1550nm TX /1310nm RX single fiber SM (SC)  
[40 km/24.9 mi.] Link Budget: 25.0 dB