

# SAPTF Series

## Stand-alone POTS 2-Wire Media Converter

### POTS 2-Wire Copper to Fiber



SAPTF3311-105

The SAPTF Series is a stand-alone media converter that provides an interface between a twisted pair RJ-11 port and a fiber port, allowing users to connect central-office voice grade signals to distant Plain Old Telephone equipment (POTS) utilizing standard telephone signaling. Two units are required to implement an end to end system. Unit A connects to a telephone line or PBX and has the ability to detect ringing voltages and to act as a telephone (LINE SIDE FXS). Unit B is the reciprocal unit and has the ability to act as a Central Office and connects to a telephone device (CUSTOMER SIDE FXO).

## Features

- Audio Transmission
- Caller ID
- Automatic Ring Down
- Duplex or Single Fiber Options

## Specifications

Standards	FCC Part 68 TBR21
Analog Port	(Telephone Emulation or FXS) Connector: RJ-11 Impedance: 600 ohms REN: 0.48 Loop Current: 20 to 60 ma. Insertion Loss: 0.0 +/-1.0 dB at 1000 Hz when both ports are terminated at 600 ohms
Analog Port	(Central Office Emulation or FXO) Impedance: 600 ohms Battery Source: 48 VDC +/- 5V Ringing Supply: 90 Vp-p Ring Frequency: 15 – 25 Hz. (Reproduces frequency detected by side A) Ring Cadence: Reproduces cadence detected by side A Insertion Loss: 1.0 +/- 1.0 dB @ 1000 Hz when both ports are terminated at 600 ohms
Voice Frequency	300 Hz – 3 KHz
Optional Jumpers	Automatic Ring Down/Normal
Status LEDs	LED colors are Green Fiber Link: ON indicates fiber link up; In Use: ON indicates unit in use; Flashing indicates ringing; Power: ON indicates power is on
Dimensions	105 Model: Width: 3.25" [82 mm] Depth: 4.7" [119 mm] Height: 1" [25 mm] 115 Model: Width: 3.7" [94 mm] Depth: 4.7" [119 mm] Height: 1.8" [46 mm]
Power Supply	External AC/DC provided; 12 VDC, 1.25A Output; unregulated; standard; UL Listed; 120-240VAC input
Environment	Operating: -10°C to +65°C Storage: -25°C to +85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2 lbs. [0.90 kg]
Compliance	Safety: Wall Mount Power Supply: UL Listed and CSA certified Emissions: FCC Class A, EN 55022 (CISPR 22) Class A, ICES 003, CE Mark
Warranty	Lifetime

## Ordering Information

**Line Side FXS: SAPTF3311-105**

**Customer Side FXO: SAPTF3311-115**

Twisted Pair (RJ-11) [5 km/3.1 mi.]  
to 1300nm multimode (ST) [2 km/1.2 mi.]  
Link Budget: 11.0 dB

**Line Side FXS: SAPTF3313-105**

**Customer Side FXO: SAPTF3313-115**

Twisted Pair (RJ-11) [5 km/3.1 mi.]  
to 1300nm multimode (SC) [2 km/1.2 mi.]  
Link Budget: 11.0 dB

**Line Side FXS: SAPTF3314-105**

**Customer Side FXO: SAPTF3314-115**

Twisted Pair (RJ-11) [5 km/3.1 mi.]  
to 1310nm single mode (SC) [20 km/12.4 mi.]  
Link Budget: 16.0 dB

## Power Supply Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: SAPTF3311-105-NA

### -NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil