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).

### 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, CE Mark

**Warranty**
- Lifetime

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**Ordering Information**

**Line Side FXS:** SAPTF3311-105
**Customer Side FXO:** SAPTF3311-115
- Twisted Pair (RJ-11) [5 km/3.1 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 (ST) [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** = North America
- **LA** = Latin America
- **EU** = Europe
- **UK** = United Kingdom
- **SA** = South Africa
- **JP** = Japan
- **OZ** = Australia
- **BR** = Brazil