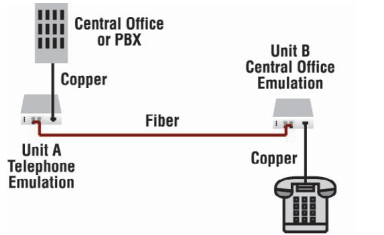


# POTS 2-wire Copper to Fiber

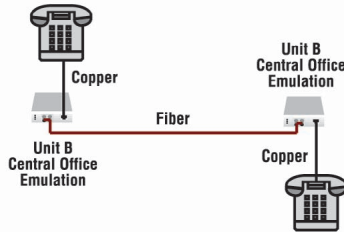
## Stand-Alone Media Converters

**SAPTF33xx-1xx**

### ▶ Loop Extender / Isolator



### ▶ Automatic Ring Down



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
- ▶ Dual or single fiber options



Convert Copper to Fiber

#### 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 100 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: 90Vp-p Ring Frequency: 15 - 30 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	300Hz - 3KHz
Fiber Optic Connector Specs	

SAPTF3311-1x0 & SAPTF3313-1x0	Min TX PWR: -19.0 dBm Max TX PWR: -14.0 dBm RX Sensitivity: -30.0 dBm Max In PWR: -14.0 dBm Link Budget: 11.0 dB
SAPTF3314-1x0	Min TX PWR: -15.0 dBm Max TX PWR: -8.0 dBm RX Sensitivity: -31.0 dBm Max In PWR: -8.0 dBm Link Budget: 16.0 dB
SAPTF3315-1x0	Min TX PWR: -8.0 dBm Max TX PWR: -2.0 dBm RX Sensitivity: -34.0 dBm Max In PWR: -7.0 dBm Link Budget: 26.0 dB
SAPTF3317-1x0	Min TX PWR: -5.0 dBm Max TX PWR: 0.0 dBm RX Sensitivity: -34.0 dBm Max In PWR: -7.0 dBm Link Budget: 29.0 dB

SAPTF3329-1x0 & SAPTF3329-1x1	Min TX PWR: -13.0 dBm Max TX PWR: -6.0 dBm RX Sensitivity: -32.0 dBm Max In PWR: -3.0 dBm Link Budget: 19.0 dB
SAPTF3329-1x2 & SAPTF3329-1x3	Min TX PWR: -8.0 dBm Max TX PWR: -3.0 dBm RX Sensitivity: -33.0 dBm Max In PWR: -3.0 dBm Link Budget: 25.0 dB

Switches / 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	Width: 3.7" [94 mm] Depth: 4.7" [119 mm] Height: 1.8" [46 mm]
Power	External AC/DC provided; 12VDC, 1.25A; unregulated; standard; UL Listed
Environment	0 - 50°C, 5% - 95% humidity (non-condensing), 0 - 10,000 feet
Shipping Weight	2 lbs. [0.9 kg]
Safety Compliance	Wall Mount Power Supply: UL approved and CSA certified
Regulatory Compliance	FCC Class A; VCCI Class A; EN 55022 (CISPR 22) Class A; ICES 003; CE Mark
Warranty	Lifetime

#### Ordering Info

##### Line Side FXS (Connects to PBX)

Product Number	Port One	Port Two
SAPTF3311-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1300nm multimode (ST) [2 km/1.2 miles]
SAPTF3313-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1300nm multimode (SC) [2 km/1.2 miles]
SAPTF3314-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm single mode (SC) [20 km/12.4 miles]
SAPTF3315-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm single mode (SC) [40 km/24.9 miles]
SAPTF3317-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm single mode (SC) [80 km/49.7 miles]

##### Single Fiber Products

Note: Recommended use in pairs

SAPTF3329-100	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm TX / 1550nm RX single fiber single mode (SC) [20 km/12.4 miles]
SAPTF3329-101	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm TX / 1310nm RX single fiber single mode (SC) [20 km/12.4 miles]
SAPTF3329-102	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm TX / 1550nm RX single fiber single mode (SC) [40 km/24.9 miles]
SAPTF3329-103	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm TX / 1310nm RX single fiber single mode (SC) [40 km/24.9 miles]

##### Customer Side FXO (Connects to Remote Phone Device)

Product Number	Port One	Port Two
SAPTF3311-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1300nm multimode (ST) [2 km/1.2 miles]
SAPTF3313-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1300nm multimode (SC) [2 km/1.2 miles]
SAPTF3314-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm single mode (SC) [20 km/12.4 miles]
SAPTF3315-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm single mode (SC) [40 km/24.9 miles]
SAPTF3317-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm single mode (SC) [80 km/49.7 miles]

##### Single Fiber Products

Note: Recommended use in pairs

SAPTF3329-110	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm TX / 1550nm RX single fiber single mode (SC) [20 km/12.4 miles]
SAPTF3329-111	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm TX / 1310nm RX single fiber single mode (SC) [20 km/12.4 miles]
SAPTF3329-112	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1310nm TX / 1550nm RX single fiber single mode (SC) [40 km/24.9 miles]
SAPTF3329-113	Twisted Pair (RJ-11) [5 km / 3.1 miles]	1550nm TX / 1310nm RX single fiber single mode (SC) [40 km/24.9 miles]