

# Telephone/Analog to 10/100 Base-T Ethernet Extender

# TC1910

- Extends Telephone/Analog Link via 10/100 Base-T Ethernet Connection
- Web-Based Configuration Interface
- PBX & Key System (POTS) Compatible
- Voice Bandwidth from 300Hz to 3.4KHz for Toll Quality Sound
- 18 LEDs for Diagnostics & Status Monitoring
- Built-in Dry Contact Relay for External Alarm and Ringer Connection
- 12VDC, Optional 24VDC, -48VDC, 125VDC, or 115/230VAC with Power Adapter
- Hardened Temperature Version (optional)



TC1910S Standalone Unit Front



TC1910S Standalone Unit Rear

The TC1910 Ethernet Telephone/Analog Extender enables telephone service over a LAN via 10/100 Base-T Ethernet connections. It has a built-in Codec that digitizes voice and converts to packets for transmission between local and remote TC1910s with designated IP addresses. It is compatible with PBX and Key Systems (POTS).

LAN connections can be made by most types of Full Duplex Ethernet devices, including switches, routers, bridges, transceivers, etc. A web-based Configuration user interface is provided to view network settings or change IP addresses from the factory default.

Phone connection is automatic upon power-up or when network interruption is restored. Depending on network traffic, multiple pairs of TC1910s can be used to set up individual point-to-point telephone/analog links. A high temperature version (-20°C to 70°C), Model TC1910T, is available for harsh environments.

The TC1910 provides Toll Quality sound within voice bandwidths from 300Hz to 3.4KHz. Two types of voice applications are supported: one, connecting to a PBX for outside telephone service; two, setting up a "hot link" point-to-point connection, e.g. between two work stations, within a LAN. Two-wire FXS (foreign exchange subscriber) is provided on the telephone side with ring down capability and FXO (foreign exchange office) on the PBX side.

Eighteen LEDs for network status, phone status, power and volume are provided to enhance status monitoring and diagnostics. Dry contacts for external alarm and ringer are standard.

The TC1910 is available in standalone (TC1910S) or rackmount (TC1910R) versions. Power is 12VDC, or 115/230VAC with an external power cube. 24VDC, -48VDC, or 125VDC power is optional. Power redundancy is standard. Phone connectors are RJ-11 Female and 10/100 Base-T connectors are RJ-45 Female.

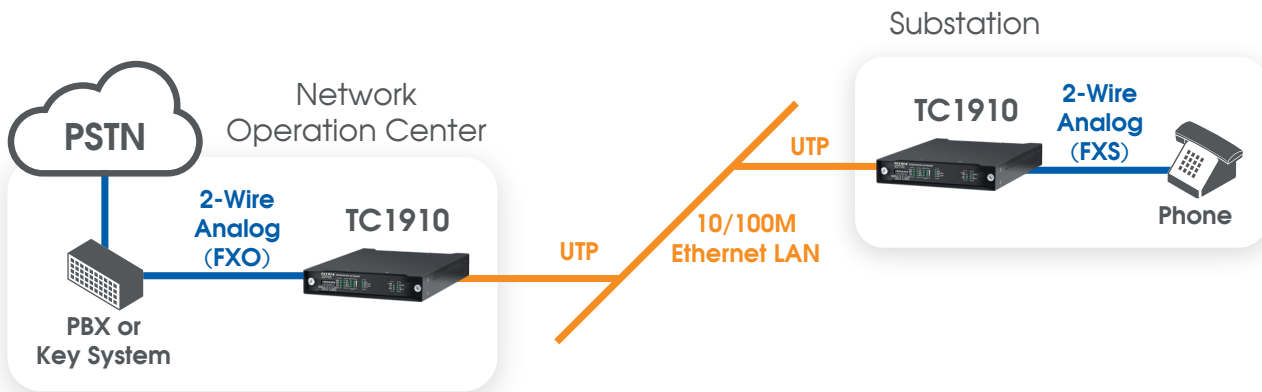


## Applications

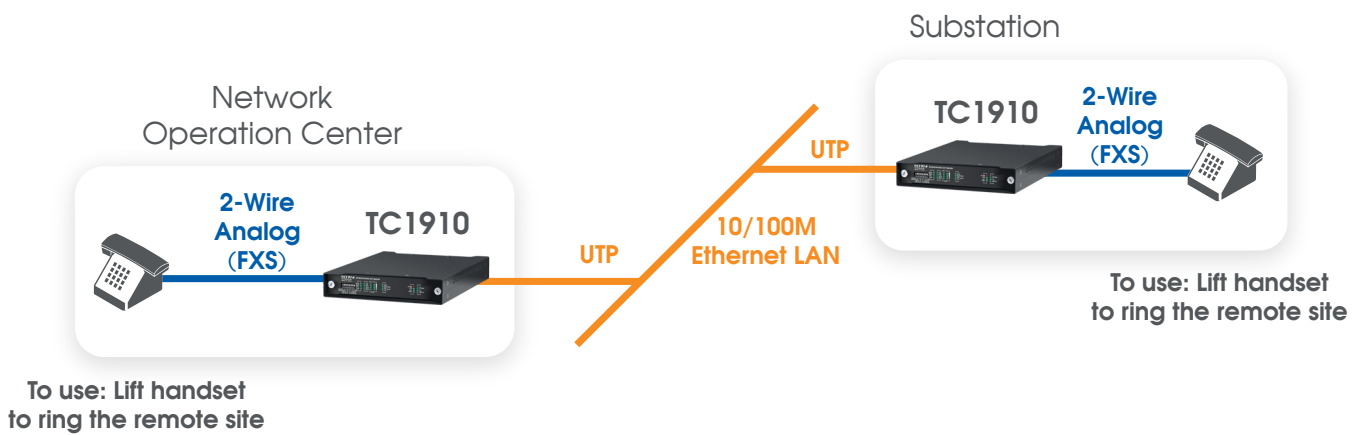
The TC1910 is intended to provide flexible point-to-point telephone/analog service via Ethernet Networks. It is often used by maintenance or service personnel in Campus, Traffic Control, or Utility Substation Networks.

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Typical Application Using TC1910s to Extend Telephone Service via an Ethernet Network in a Substation Environment



Typical Application Using Two TC1910s to Provide a "Hot Link" Voice Service via an Ethernet Network

**Audio Bandwidth**

.....300Hz to 3.4KHz

**Electrical**

Phone Connector.....RJ11 Female  
 Ring Voltage..... 55Vrms at 25Hz  
 (Depending on the ringing load)  
 FXO Impedance..... 600 Ohm  
 FXS Impedance..... 600 Ohm  
 Ethernet.....RJ45 Female  
 Ethernet Speed..... 10/100 Mbps

**Visual Indicators**

Off Hook, Ring, Master/Slave, Hot Link, Interface Status, Tx & Rx volume,FXO, FXS, Alarm, Link, Sync, Ethernet Activity, VccA, VccB, PWR A, PWR B

**Alarm/Ring**

Dry Contact.....Normal OPEN

**Power**

Standard ..... 12VDC @500mA  
 Optional.. 24VDC, -48VDC, 125VDC or  
 ..... 115/230VAC with power cube

**Temperature**

Operating ..... -10°C to 50°C  
 Hi-Temp (optional) ..... -20°C to 70°C  
 Storage..... -40°C to 90°C  
 Humidity .....95% non-condensing

**Physical (Standalone Unit)**

Height ..... (3.53 cm) 1.39"  
 Width ..... (18.13 cm) 7.14"  
 Depth ..... (24.89 cm) 9.80"  
 Weight ..... (907 gm) 2.0 lbs



SAI GLOBAL  
 ISO 9001  
 Quality

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Note: Information contained in this data sheet is subject to change without prior notice.