

## EOCPxx4020-110 Quick Start Guide

### Introduction

Transition Networks' EOCPxx4020-110 Ethernet over Coax Extenders with PoE+ deliver near Gigabit data and power over Coax, letting you leverage your current Coax infrastructure when upgrading to IP cameras and surveillance systems.

See the full EOC User Guide for Product Numbers, Applications, Configuration Examples, Features, Package Contents, Port Descriptions, Web Config pages, Technical Specs, Warranty, Compliance, Error Messages, and Troubleshooting.



### Installation

**Note:** See the EOC User Guide for important Cautions and Warnings including Operating temperature, Air Flow, Mechanical Loading, Circuit Overloading, etc.

**Mounting** Install the EOC units indoors (or in an appropriately rated enclosure). Securely mount the EOC units. Do not support the EOC units by the attached cables. Use an optional mounting bracket to mount the EOC unit to a wall or other structure. Mount an EOC unit onto a DIN rail using an optional DIN Rail Mount Kit. See the User Guide for specific mounting options (ordered separately).

**Front Panels:** Local Device (top right) Remote Device (bottom right):



### Connections

**Coax Cable Connection:** Connect the EOCPSE4020-110 unit's BNC connector to the coaxial cable. If an EOCPPE4020-110 unit is connected at the far end and powered up, then the green DATA LED will light steadily to indicate a good connection. An EOCPSE4020-110 at one end of the cable should only be connected to an EOCPD4020-110 at the other end of the cable. The EOCPxx4020-110 is not compatible with other equipment such as analog video amplifiers.



**Combo (Shared) Port:** note that in terms of copper versus fiber port selection / priority, only one port can be active at any given time; by default the SFP port takes precedence over the copper port (configurable on Ethernet Web GUI page).

**SFP / Fiber Connection:** The EOC lets you install an SFP optic of your choice in order to make a fiber connection. The EOC has a single SFP port. The SFP port supports any MSA compliant 1000Base-X SFP module. For temperatures above +50 °C, industrial SFP modules (+85 °C) must be used. Install and connect Single-strand or Two-strand Fiber Cable.

**Ethernet Cable Connection:** Connect the EOCPD4020-110 RJ45 Ethernet jack to the camera or other network equipment using a standard Ethernet cable. Both patch and crossover type Cat5 or Cat6 cables are supported. The Combo Port Link/ACT LED will light to indicate a network connection and will blink off during network activity.



**Power over Ethernet:** Using the PoE option, the EOCPSE4020-110 can automatically enable delivery of up to 30 watts of power to the EOCPD4020-110. The EOCPD4020-110 can supply up to 25.5 Watts of POE (IEEE 802.3at - Class 4) to compatible network devices, via its Ethernet port.

Remote: IEEE 802.3at PSE at 30W. Local Power Source: DIN or TB (+48V@45W). Remote POE-PSE: IEEE 802.3at - Class 4. Power Out: 30 W. Power at PD: 25.5W.

**Install the RJ-45 Copper Cable:** **1.** Locate a 10/100/1000Base-TX compliant copper cable with male RJ-45 connectors installed at both ends. **2.** Connect the RJ-45 connector at one end of the cable to the EOCPxx4020-110 10/100/1000Base-TX RJ-45 port. **3.** Connect the RJ-45 connector at the other end of the cable to the 10/100/1000Base-TX RJ-45 port on the other device (camera, wireless access point, etc.). **Note:** The AutoCross feature allows either straight-thru or crossover cables.

**Grounding:** An earth ground chassis stud is provided on the back panel. Note that bonding the earth ground to the chassis stud is required for circuit protection.

## Powering the EOC

The 90W Power supply, 25148 is an option for powering the Local PSE unit, and is optional for use with the Remote PD unit. The PWR LED will blink to indicate the presence of power to the EOCPxx4020-110. (For indoor use only.)

**48 VDC IN Options:** The two +48 VDC input options are the 4-Pin Mini DIN (near right) and the 2-Pin Terminal Block (far right). **Note:** use the flat-topped grip to remove the power supply cable from the +48VDC IN 4-Pin Mini DIN.



### Local PSE (EOCPSE4020-110) Power Input Options:

1. A 4-Pin mini DIN with the designated AC to DC adapter OR
2. A 2-Pin Terminal Block connectors for +48 VDC power source that must meet IEEE 802.3 af/at isolation requirements of 1500VAC or 2250 VDC.



### Remote PD (EOCPD4020-110) Power Input Options:

1. A 4-Pin mini DIN with the designated AC to DC adapter OR
2. A 2-Pin Terminal Block connectors for +48 VDC power source that must meet IEEE 802.3 af/at isolation requirements of 1500VAC or 2250 VDC. OR
3. PoE input power to the Remote unit from the Local unit via the Coax cable.

## Software Operation

**Web GUI Configuration:** The Web GUI lets you access the Login page and subsequently the various configuration pages (Coax, IP, Ethernet, Device, Auto Power Reset, and Advanced) and Status (Power, SFP, and Remote Upgrade Status) pages. The default IP address is **192.168.0.1** (Local) and **192.168.0.2** (Remote). The default password is **admin**.

## Status LEDs

**PWR:** Power and bootloader status: Power applied: **Green** - ON.  
Firmware update in progress: **Orange** – ON and/or BLINK.

**COAX:** Power delivery (local) or sourcing (remote) status and/or fault: see User Guide for Local vs. Remote unit LED descriptions.

**DATA** – Coax data link; Linked: **Green – BLINK**.

**SECURITY (Coax):** Secure mode, pairing mode, and key/config state: Not secure: OFF. Secure: **Green** – ON.

In Config mode: **Green** – Slow BLINK. In Pairing mode: **Green** – Fast BLINK. Received key & finished config: **Green** – 3 BLINKS.

**Link/ACT** - 1GE TP or Fiber port: 1000Mbps: **Green** - ON link, BLINK activity. 100Mbps: **Green** and **Yellow** - ON link, BLINK activity. 10Mbps: **Yellow** - ON link, BLINK activity.

**POE** – Power Over Ethernet status (Remote PD unit only): No PD detected: OFF. Power applied: **Green** – ON. Detect fault: **Yellow** – ON: Fault or Remote is not a PoE device. Classification fault: **Yellow** - BLINK.

**RESET button:** If doing security Pairing for coax encryption, do before final deployment of Local PSE and Remote PD units in the field. See the User Guide for details, as the **RESET** button performs other functions, and you could lose Remote PD unit connection.



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