POC252-1CXP-1T

1-Port IP over Coax Extender with PoE-AT (switch end)

Overview

The IFS® Power over Coax Network Switches and Media Converters by Interlogix® are designed to transmit both Ethernet data and PoE over coax cable up to 1 km (3,280 ft). This solution provides a cost-effective approach by reducing installation cost and increasing ROI by utilizing existing coax to migrate an existing analog video system to an IP video surveillance system. The PoC Network Switches also provide built-in PD-alive monitor health and status of an IP camera. In addition, this solution eliminates the need for providing local power at an IP PoE camera location.

• The POC2502-8CXP-2T-2S is an 8-port Power over Coax Managed Switch that supplies data and power transmission on coax via BNC ports. In addition, the two RJ45/SFP Gigabit combo ports provide a connection to an Ethernet network. • The POC2502-16CXP-2T-2S is a 16-port Power over Coax Managed Switch. The switch supplies data and power transmission on coax via BNC ports as well as two RJ45/SFP Gigabit combo ports for connection to an Ethernet network. • The POC252-1CX-1P Power over Coax Media Converter is for use at the camera end to convert the data/power from the coax. The switch provides 10/100Mbps data and POE-af/at compliant power on the RJ45 port for an IP camera. • The POC252-1CXP-1T Power over Coax Media Converter transmits data and injects power over coax for use with the POC252-1CX-1P. This is used to deploy a single IP camera on a length of coax cable and a multi-port BNC switch is not needed. This media convertor is for use at the switch end of a system.

Details

- 1-port (COAX) with up to 36W power output
- Auto-negotiation and auto-MDI/MDI-X
- IEEE 1901 communication Standard
- Wavelet-OFDM modulation
- 128-bit AES security encryption
- Daisy-chain (up to 3 devices on one link)
- Half-duplex back pressure and IEEE802.3x full-duplex pause-frame flow control
- Remote power up to 1 km
- Compatible with POC252-1CX-1P (Camera End) Media Convertor

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Technical Specifications

General

Technology	IEEE1901
Compatible with MCR rack	No

Connections

Coax Ports	1
Connector	BNC
RJ-45 ports	1
Port type	10/100
Fault relay output	No

Physical

Physical dimensions	94 x 70 x 26 mm
Net weight	375 g
Colour	Black
Mounting type	Wall mount

Environmental

Operating temperature	-10 to +60°C
Storage temperature	-40 to 75°C
Relative humidity	0 to 95% noncondensing

Electrical

Power supply type	52 to 56 VDC
Power consumption	34 W
PoE/PoE+	PoE-at (Power over Coax)
PoE power budget	30.8 W (via PoE-at switch) 36 W (via PSU)
Redundant power	No

Physical Ports

10/100Base-T(x) Ports	RJ-45 (1) & BNC (1)
Port Configuration	Auto MDI/MDI-X
Port Speed	Auto-negotiate
LED Indicators and Switch	

Electrical and Mechanical

Power Input	Via Power Over Coax
Power Consumption (Full PoE load)	Max 34 W
Dimensions (W x D x H)	94 x 70 x 26 mm
Weight	375 g
Environmental	
Operating Temperature	-10 to +60°C
Storage Temperature	-40 to +75°C
Relative Humidity	0% to 95% (non-condensing)

Standards Compliance

Regulatory Standards	FCC Part 15 Class A, CE
IEEE Standards	IEEE 802.3 Ethernet
IEEE 802.3u Fast Ethernet	
IEEE 802.3af Power over Ethernet	
IEEE 802.3at Power over Ethernet Plus	

Power over Ethernet

PoE Standard	IEEE 802.3af / 802.3at PoE
PoE Power Supply Type	End-span
PoE Power Budget	Upto 25 W via Coax
PoE Power Output Via Coax Port	Max. 30.8 W (via PoE Switch) 36 W (via PSU)
Power Pin Assignment (RJ45)	1/2(+), 3/6(-)
Power Pin Assignment (COAX)	BNC center pole : DC+ / Hi, BNC shield : DC - / Lo

IP Over Coax Interface

Cabling	Coaxial cable: 75 ohm, RG-6/U cable (Improved performance)
RG-6/U cable, less than 12Ohm/1,000ft.	
RG59/U cable, less than 30Ohm/1,000ft.	
Ethernet Communication Standard	IEEE1901
Modulation Type	Wavelet-OFDM
Security	128-bit AES encryption
Frequency Band	2 to 28 MHz

Data Rate (Upload/Download)*

200m	93 / 93 Mbps
400m	93 / 92 Mbps
600m	92 / 88 Mbps
800m	83 / 75 Mbps
1000m	74 / 55 Mbps

Typical Power Over Coax*

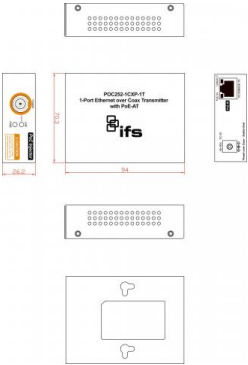|	
200m	29W (56VDC in) 16.9W (PoE+ in)
400m	22W (56VDC in) 14.3W (PoE+ in)
600m	13W (56VDC in) 10.2W (PoE+ in)
800m	10W (56VDC in) 8.3W (PoE+ in)
1000m	8W (56VDC in) 7.1W (PoE+ in)
* Based on RG-59 Bare Copper cable:	Data rate and power performance is subject to the quality of cable used and environmental factors.

Maximum Distance

PoE+ output	200m
PoE output	600m
Without PoE (Data only)	1,200m

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United Technologies

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