Vi2701TX

MaxiiCopper™

Ethernet and 60W PoE Extended UTP Transmitter

Features

- Provides Ethernet data and PoE power up to 60W at extended distances
- It extends Ethernet and PoE up to 3,000 feet (914m) of UTP cables
- Up to 74W can be provided from the Vi2701RX or the Vi2500 series to the Vi2701TX
- Provides IEEE 802.3af,at, UPoE PoE up to 60W
- Meets the increasing requirements for high power PoE fixed and domes cameras
- MegaPixel Certified (MPC™) high data rate, for virtual loss free transmission of cameras requiring Jumbo Frame transmission
- Symmetric Bandwidth (SBW™) provides consistent upload and download with Virtual Zero Packet Loss (VZPL™) over total specified distance
- Type tested to RFC 2544 TCP/IP network bandwidth packet transmission standards and Jumbo Frame Transmission
- Wide operating temerature of -20°C to +75°C
- Complient to IEEE 802.3af/at and can drive loads with one PD or 2 PD remote PoE loads

4K UHD | 60W UPoE | SBW™ | 011→011 VZPL™ | EPTP™ | MPC™ | LPC™

Applications

- Upgrading analog CCTV installations to digital systems
- Expanding networks in industrial environment
- Any IP CCTV transmission that requires high power PoE
- Eliminates any local power requirements for IP cameras, requiring up to 60W at the camera location

Vigitron's MaxiiCopper™ Vi2701TX remote unit is designed to meet the growing need for Ethernet and PoE transmission of high power cameras and other PoE powered devices. It is able to receive up to 74W PoE power beyond Ethernet standard distances and eliminate the need for expensive remote-site power supplies, significantly lowering system installation and operating costs. The Vi2701TX supports both single PD or dual PD PoE cameras. It is compatible with Vigitron's Vi2701RX and Vi2500 series extended UTP midspans.

The Vi2701TX includes unique features that assure high performance required to support the largest Megapixel cameras. The Vi2701TX's Symmetric Bandwidth (SBW™) assures full bandwidth transmission is maintained over the entire operational range for both uploads and downloads with Virtual Zero Packet Loss (VZPL™). The MaxiiCopper™ Vi2701TX can easily fit inside most camera housings and junction boxes. It is MegaPixel Certified (MPC™), type tested to network packet performance standards, along with major manufacturer compatibility testing to guarantee error-free and quality operation.

Installation cost savings, tested and proven performance, and major camera manufacturer compatibility all go into making Vigitron's MaxiiCopper™ Vi2701TX, a great choice for extended distance data and PoE power transmission.

Technical Specification*

Electrical

Ethernet Interface	Standard 10/100BaseT
Ethernet Rate	10/100 Mb/s, Auto selectable Full speed / full duplex at maximum rated distance
UTP**	100 Ohm +/- 20%, 3,000 feet (914 m) at 10BaseT 2,100 feet (640 m) at 100BaseT
Power Input	IEEE 802.3af,at, UPoE up to 74W
PoE Output	56V, @ 60W max
Status LEDs	Power Standard Ethernet: Traffic, Link Extended Ethernet: Traffic, 10/100BaseT
Connectors	Ethernet Interface: RJ-45 Connector Extended Interface: RJ-45 Connector Output Power: 2-pin Pluggable Terminal Block
RFC	2544 TCP/IP Packet Transmission
Compatible with	IEEE 802.3af PoE, IEEE 802.3at PoE, UPoE
RFC	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet

Regulatory

Safety	CE, UL, cUL
Environmental	RoHS

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -20°C to +75°C Storage: -40°C to +80°C

Mechanical

Dimensions	1.4 x 2.15 x 4.15 in, 3.5 x 4.3 x 10.4 cm (HxWxL)
Weight	0.37 lb (167 g)
Material	Aluminum

*Specifications subject to change without notice.
**Distances are based on indicated power at the PD input and are obtained using Cat-5e cable, 56V power supply. Factors such as cabling, connections and environmental conditions may affect actual distances and should be taken into consideration.

Ordering Information

Part No.	Description
Vi2701TX	Ethernet and High-Power PoE Extender (Remote Unit)

Related Products

Part No.	Description
Vi2701RX	Ethernet and High-Power PoE Extender (Local Unit)
Vi2508	8-port High-Power Extended UTP Midspan
Vi2516	16-port High-Power Extended UTP Midspan

Data and PoE Distance

UTP

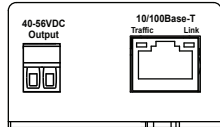| Data Rate	Data Only	Data + 802.3af PoE	Data + 802.3at PoE	Data + 50W PoE
10BaseT	3,000 ft. 914 m	3,000 ft. 914 m	1,500 ft. 457 m	750 ft. 228 m
100BaseT	2,100 ft. 640 m	2,100 ft. 640 m	1,500 ft. 457 m	750 ft. 228 m

Mechanical Drawings

5.71"
14.5 cm

4.16"
10.56 cm

Vi2701TX High Power Ethernet and PoE Extender

2.15"
4.3cm

PoE Out ○
Power ○

VIGITRON
www.vigitron.com

5.30"
13.46 cm

Top View

40-56VDC
Output

10/100Base-T
Traffic   Link

Right View

Extended Ethernet
10/100   Traffic

Input Power
52-57VDC

1.4"
3.5cm
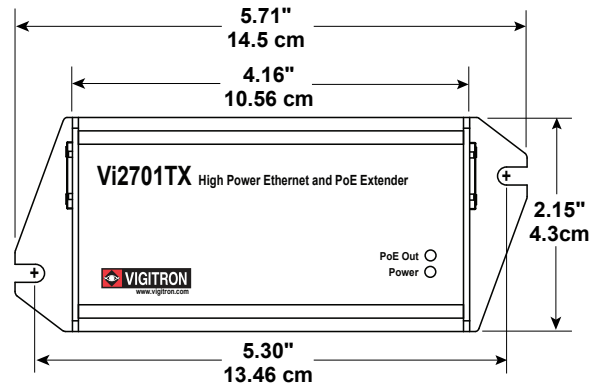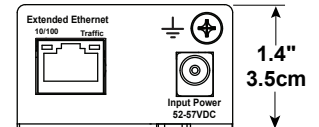
Left View

Application Drawings

Powering a PoE camera and an IR light over extended UTP

Network Switch

Data

Vi2516

IR

+48VDC

Vi2701TX

PoE Camera
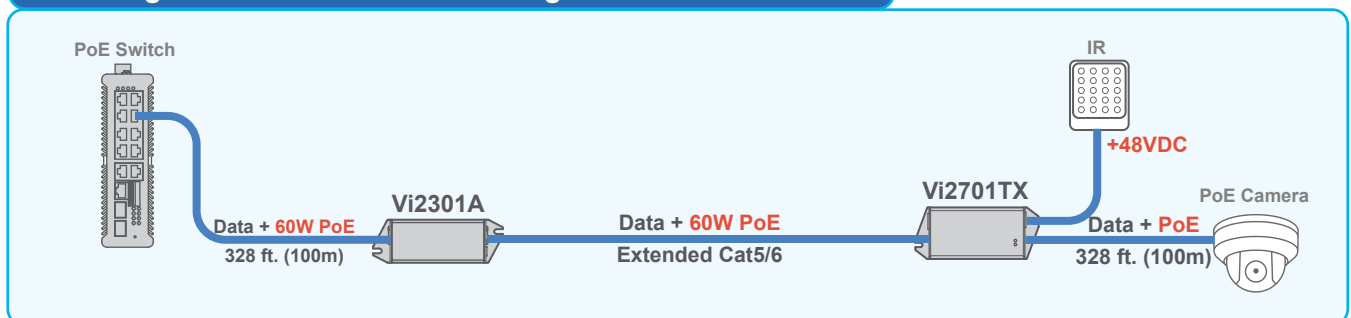
Data + PoE

328 ft. (100m)

The Vi2701TX can be used with a Vi2516 extended UTP PoE Midspan to power a PoE camera and provide DC power to an IR light.

Powering a PoE camera and an IR light over extended UTP

Network Switch

Data

IR

+48VDC

Vi2701RX

Vi2701TX

PoE Camera

Data + 60W PoE

Extended Cat5/6

Data + PoE

328 ft. (100m)

Power Supply
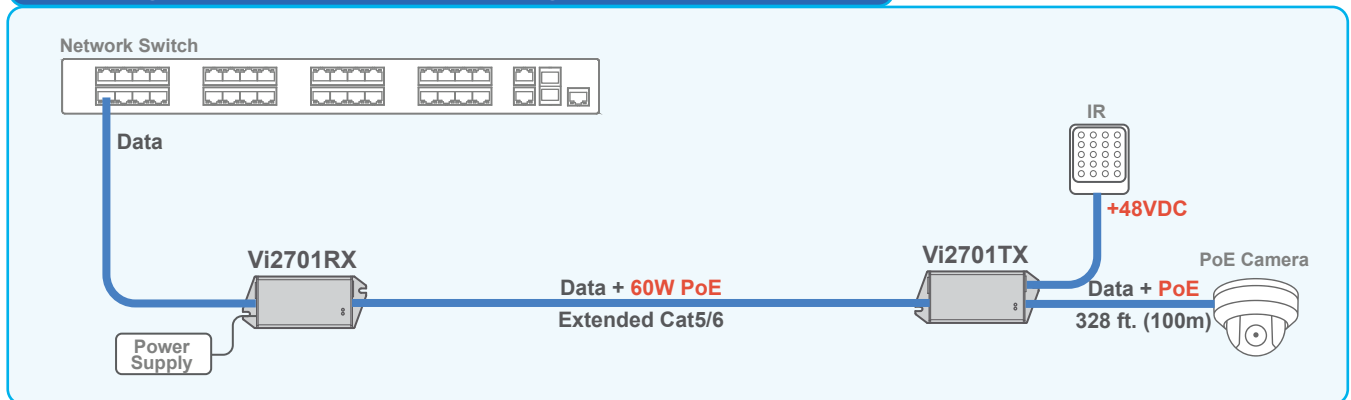
The Vi2701RX can be used with a Vi2701TX to power a PoE camera and provide DC power to an IR light over extended UTP.

Powering a PoE camera and an IR light over extended UTP

PoE Switch

IR

+48VDC

Vi2301A

Vi2701TX

PoE Camera

Data + 60W PoE

328 ft. (100m)

Data + 60W PoE

Extended Cat5/6

Data + PoE

328 ft. (100m)

The Vi2701TX can be used with a Vi2301A to power a PoE camera and provide DC power to an IR light over extended UTP.