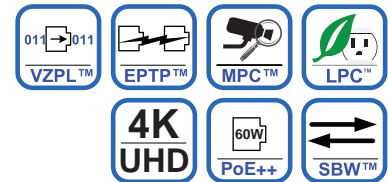# Vi2701TX

MaxiiCopper™ Ethernet and 60W PoE++ Extended Transmitter

Features

- Provides Ethernet data and PoE power up to 60W at extender distances. It extends Ethernet over 3,000 feet (914m) of UTP cables.
- Up to 74W can be provided from the Vi2701RX or the Vi2500 series to the Vi2701TX.
- Capable of providing full PoE class power up to 3,000 ft. (909m).
- 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.
- Complient to IEEE 802.3af/at and can drive loads with one PD or 2 PD remote loads.
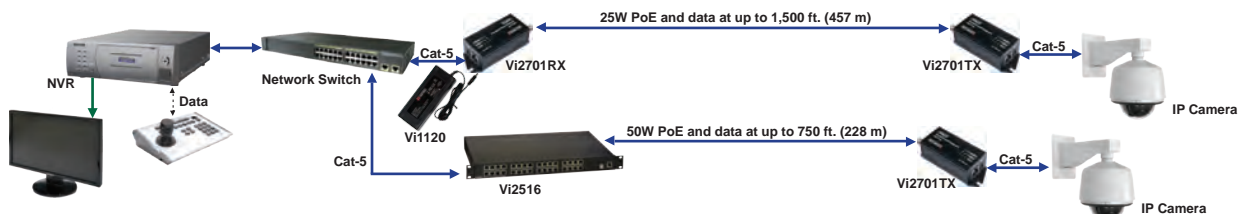- Limited lifetime warranty

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 units is designed to meet the growing need for Ethernet and PoE transmission of high powered cameras and other PoE powered devices. With the ability to receive 60W power beyond Ethernet standard distance, the Vi2701TX can provide up to 60 watts, eliminating the need for expensive remote-site power supplies and power sources and significantly lowering system installation and operating costs. The Vi2701TX supports both single PD or dual PD IP cameras. The Vi2701TX is compatible with Vigitron's Vi2701RV and Vigitron's Vi2500 combination series of Midspans and UTP extenders. The Vi2701TX can operate with Vi2500 series, while Vi2701RX is compatible with Vi2300 series.

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™). 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, your best choice for extended distance data and PoE++ power transmission.

Application Diagram

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	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: Pluggable Terminal Block
RFC	2544 TCP/IP Packet Transmission
Compatible with	IEEE 802.3af PoE, IEEE 802.3at PoE, PoE++
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

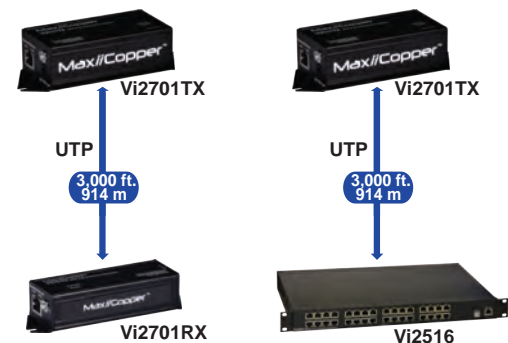|	
Dimensions	1.4 x 2.15 x 4.15 in, 3.5 x 4.3 x 10.4 cm (HxWxL)
Weight	0.37 lb (167 g)
Material	Aluminum

*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.
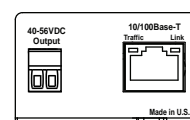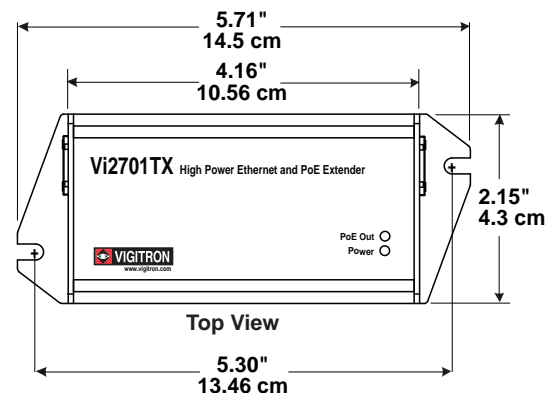
Ordering Information

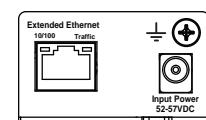| Part No.	Description
Vi2701TX	Ethernet and High-Power PoE Extender (Remote Unit)
Vi2701RX	Ethernet and High-Power PoE Extender (Local Unit)
Vi1120	120W Wall-mount Power Supply
Vi2508	8 port High-Power Midspan + UTP Extender
Vi2516	16 port High-Power Midspan + UTP Extender

System Configuration

Vi2701TX   Vi2701TX

UTP   UTP

3,000 ft. 914 m   3,000 ft. 914 m

Vi2701RX   Vi2516

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

5.71" 14.5 cm

4.16" 10.56 cm

Vi2701TX High Power Ethernet and PoE Extender

PoE Out ○
Power ○

VIGITRON
www.vigitron.com

2.15" 4.3 cm

Top View

5.30" 13.46 cm

40-56VDC Output   10/100Base-T Traffic Link

Made in U.S.A.

Extended Ethernet 10/100 Traffic   Input Power 52-57VDC

1.4" 3.5 cm

Right View   **Left View**

*Compatibility with first four ports 1-4 of Vi2508 / Vi2516