Vi2401A

Single Port Ethernet Extender over Coax

Features

- Converts Ethernet UTP to transmit network data and PoE over standard coax cable.
- Extends Ethernet beyond 328 feet (100 m) limitation up to 5,000 feet (1,515 m) over Coaxial cables.
- Saves additional equipment costs and reduces installation time.
- Pass Through PoE (PTP™) compatibility with 802.3af and 802.3at Power over Ethernet reduces installation costs while maintaining camera safeguards.
- MegaPixel Certified (MPC™) High data rate, ideal for high bandwidth requirements of Mega-pixel cameras, multiple IP cameras systems and 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.
- Type tested for -40°C to +75°C temperature range under NEMA-TS2 testing standards.
- Complies to major IEEE standards and RFC network protocols for UDP, TCP/IP, HTTP/HTTPS.

4K UHD | SBW™ | VZPL™ | PTP™ | MPC™ | HRD™ | LPC™

Applications

- Retrofit analog CCTV installations into Digital systems.
- Extending Networks in industrial environment.
- CCTV System for Casinos, Airports, School Campuses

Vigitron's MaxiiCopper™ Vi2401A is an Ethernet over Coax extender that brings new performance standards to the growing need for high speed transmission of full bandwidth Ethernet and PoE over extended distances of coaxial cables. Its unique Symmetric Bandwidth (SBW™) assures full bandwidth transmission is maintained over the entire operational distance for both uploads and downloads with Virtual Zero Packet Loss (VZPL™). Bandwidth assurance provides the ability to transmit multiple cameras on single camera runs with no information loss.

Pass Through PoE (PTP™) eliminates the need for additional remote site power while allowing a single PoE source, such as a PoE network switch, to provide power to both transceivers and the camera. This feature eliminates the need for local and remote site power supplies. Type tested under NEMA-TS2 environmental standards for extended temperature operations between -40C° to +75C°, the Vi2401A is the perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos, and many more. MaxiiCopper's™ Vi2401A is low power and easily fits inside most cameras housing and junction boxes. Best of all, the Vi2401A is MegaPixel Certified (MPC™), type tested to network packet performance standards, and major manufacturer compatibility tested to assure you error free and reliable operations. It is available in single, four, eight and sixteen port configurations to meet every system application requirement.

Installation cost savings, proven performance, and major camera brand compatibility all go into making Vigitron's MaxiiCopper™ Vi2401A your best choice for extended distance data and power transmission.

VIGITRON

The Smart Choice for Transmission Solutions

www.vigitron.com

Technical Specification*

Electrical

Ethernet Interface	Standard 10/100BaseT
Data Rate	Auto select 10/100 Mb/s Full speed / full duplex at maximum rated distance
Coax	75 Ohm, 5,000 feet (1,515 m) at 10BaseT 1,800 feet (549 m) at 100BaseT
Power Consumption	12 VDC, 24 VAC, PoE @150 mA (max.) 1.8 W with external power supply or PoE
Status LEDs	Power On Standard Ethernet: Traffic, Link Extended Ethernet: Traffic, 10/100BaseT
Connectors	Ethernet Interface: RJ-45 Connector Extended Interface: Female BNC Power: IEC380-8 inlet
PoE Compatibility	IEEE 802.3af/at/bt up to 60W
RFC	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet 2544 TCP/IP Packet Transmission
Jumbo Frame Support	Up to 9,600 bytes

Regulatory

FCC	Part 15, Subpart B, Class B 2010
Emissions	EN 5502:2006+A1:2007 EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008 EN 55024:1998+A1:2001+A2:2003
Safety	CE, WEEE
Environmental	RoHS

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -40°C to +75°C per NEMA-TS2 testing Storage: -40°C to +85°C

Mechanical

Dimensions	1.15x1.6x3.73 in., 3.0x4.0x9.5 cm (HxWxL)
Weight	0.212 lb, 96 g
Material	Extruded Aluminum

* Specifications subject to change without notice.

Ordering Information

Part No.	Description
Vi2401A	Single port Coax Ethernet Extender

Related Products

Part No.	Description
Vi2400WP	Single port IP67 Coax Ethernet Extender
Vi2400A	Single port Mini Coax Ethernet Extender
Vi2404A	4-port Coax Ethernet Extender
Vi2408A	8-port Coax Ethernet Extender
Vi2416A	16-port Coax Ethernet Extender
Vi2601	Single port Extended Coax Midspan
Vi2608	8-port Extended Coax Midspan
Vi2616	16-port Extended Coax Midspan
Vi0012	12 VDC Wall-mount Power Supply

Data and PoE Distance

Data Rate	Distance [1] (without POE)	Distance [2] (with POE)
10BaseT	5,000 ft. (1,515m)	3,000 ft. (914m)
100BaseT	1,800 ft. (546m)	1,800 ft. (546m)

1. Distance figures are obtained using in house testing mirroring installations. Factors such as cabling, connections, use of power and environmental conditions may affect actual distances and should be taken into consideration.
2. Distance figures are based on RG59U Coax cable and external power supply for extender and camera.
   Specifications reflect operating using Pass Through PoE (PTP™) providing power for both transceivers and camera from a single source. Distances may increase if transceivers are locally powered.
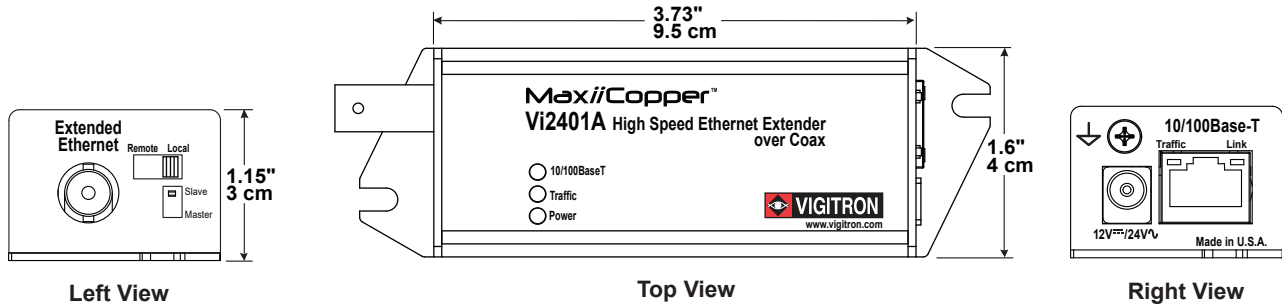
Note:
Single pair wire application designs need to be confirmed by Vigitron tech support.

Mechanical Drawings

Left View

Extended Ethernet
Remote Local
Slave
Master

1.15"
3 cm

Top View

3.73"
9.5 cm

Max*ii*Copper™
Vi2401A High Speed Ethernet Extender over Coax

○ 10/100BaseT
○ Traffic
○ Power

VIGITRON
www.vigitron.com

1.6"
4 cm

Right View

10/100Base-T
Traffic   Link

12V⎓/24V∿   Made in U.S.A.

Application Drawings

Transmitting Ethernet and PoE over Extended Coax Cables

Vi2401A

Data + PoE
Extended Coax

Data + PoE
328 ft. (100m)

Vi2400A

Vi2401A

Data + PoE
Extended Coax

Vi2400A

Data + PoE
328 ft. (100m)

PoE Cameras

Vi2401A

Data + PoE
Extended Coax

Vi2401A

Data + PoE
328 ft. (100m)

PoE Cameras

Data + PoE
328 ft. (100m)

Network Switch
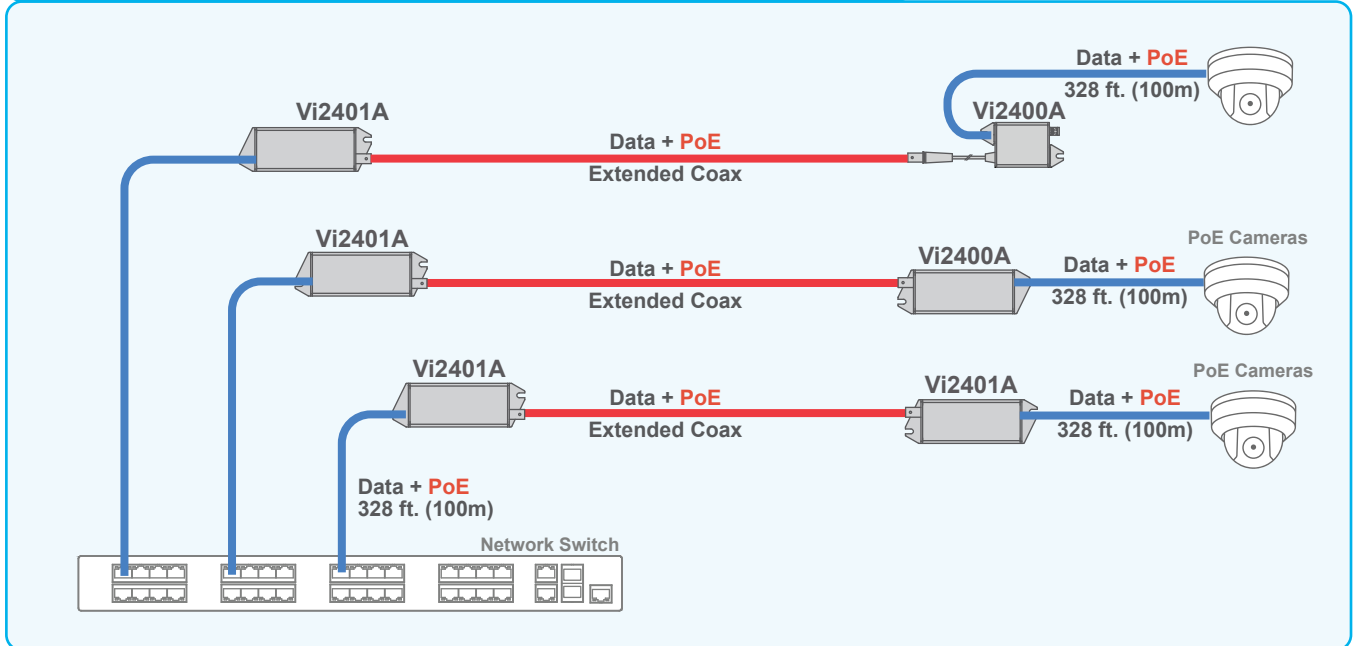
The Vi2301As and Vi3005 can be used to connect multiple PoE cameras at extended distances.