

# Vi2301A

## MaxiiCopper™ High-Speed/High Power Ethernet Extender over UTP

### Features

- Extends Ethernet beyond 328 feet (100 m) limitation up to 3,000 feet (914 m) over UTP cables
- Requires no switch setting or network programming
- Extended Pass Through PoE (EPTP™) compatible with 802.3af, 802.3at and PoE++ up to 74W
- UPoE compliant
- Mega-Pixel 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™)
- Type tested to RFC-2544 TCP/IP network bandwidth packet transmission standards
- Supports one-pair or four-pair UTP wires with built-in transceiver cable connectivity tester
- Type tested for -40°C to +75°C temperature range under conforming to NEMA-TS2 testing standards
- Data rate selectable to for maximum bandwidth utilization
- Complies to major IEEE standards and RFC network protocols for UDP, TCP/IP, HTTP/HTTPS
- USA designed and manufactured
- Limited Life Time Warranty



### Applications

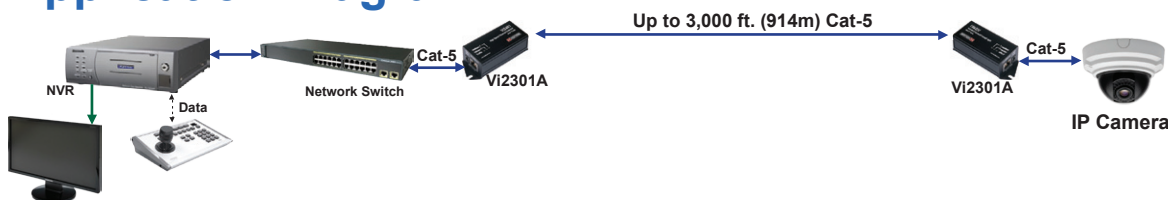
- Extending Ethernet distances beyond Ethernet 100 m limit
- Retrofit UTP analog CCTV installations into Digital systems
- Providing high power PoE to PTZ cameras at long distances
- CCTV System for Casinos, Airports, School Campuses

Vigtron's MaxiiCopper™ Vi2301A UTP Ethernet extender brings new performance standards to the growing need for high speed transmission of full bandwidth Ethernet and high-power PoE power over extended distances. 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. It can use 1 pair or 4 pairs of UTP and requires no switch setting or network programming.

Extended Pass Through PoE (EPTP™) 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. The Vi2301A can pass through PoE power, up to 74W, UPoE compliant. Type tested under NEMA-TS2 environmental standards for extended temperature operation between -40°C to +75°C. The Vi2301A is the perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos, and many more. MaxiiCopper's Vi2301A is low power and can easily fit inside most cameras housing and junction boxes. Best of all, it is MegaPixel Certified (MPC™), type tested to network packet performance standards, and major camera brand compatibility tested to assure you error free and reliable operations. The Vi2300A series is available in single, four, eight and sixteen port configurations to meet every application requirement.

Installation cost savings, proven performance, and major camera brand compatibility all go into making Vigtron's MaxiiCopper™ Vi2301A the best choice for extended distance data and power transmission.

### Application Diagram



The Smart Choice for Transmission Solutions

[www.vigtron.com](http://www.vigtron.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
UTP	100 Ohm +/- 20%, Cat5 or better 10BaseT: up to 3,000 ft. (914 m) 100BaseT: up to 2,100 ft. (640 m)
Power Consumption	12 VDC, 24 VAC, POE af/at @150 mA maximum 1.5 W with external power supply 2 W using PoE
Status LEDs	Power On Standard Ethernet: Traffic, Link Extended Ethernet: Traffic, 10/100BaseT
Connectors	Ethernet Interface: RJ-45 Connector Extended Interface: RJ-45 Connector Power: IEC380-8 inlet
RFC	2544 TCP/IP Packet Transmission
Compatible with	IEEE 802.3af PoE, IEEE 802.3at PoE, UPoE Compliant
RFC	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility	IEEE 802.3af, IEEE 802.3at
Jumbo Frame Support	Yes

## 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
Environmental	RoHS

## Environmental

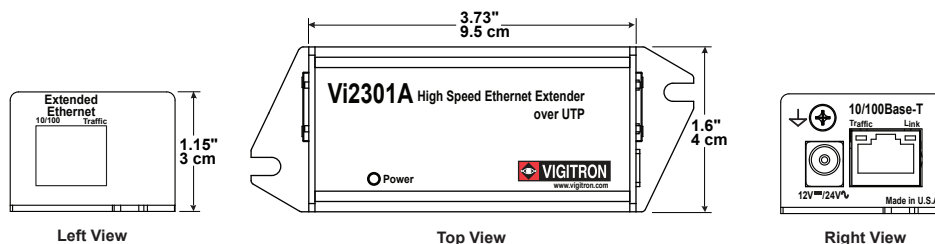
Humidity	0 to 95%, non-condensing
Temperature	Operating: -40°C to +75°C per NEMA-TS2 testing Storage: -40°C to +85°C

## Mechanical

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

## Accessories

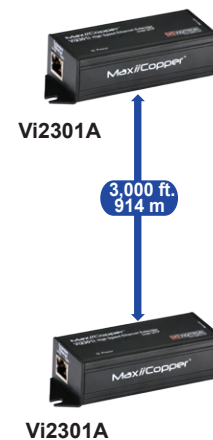
12 VDC wall-mount power supply (optional)



## Ordering Information

PART No.	Description
Vi2301A	Single port UTP Ethernet Extender
Vi2304A	4-port UTP Ethernet Extender
Vi2308A	8-port UTP Ethernet Extender, 19", 1U
Vi2316A	16-port UTP Ethernet Extender, 19", 1U
Vi0012	12 VDC Wall-mount Power Supply

## System Configuration



## Data and PoE Distance<sup>2</sup>

Data Rate	4-Pair <sup>3</sup> (Data + PoE class 2)	1-Pair (Data only)
10BaseT	n/a	3,000 ft. (914 m)
100BaseT	2,100 ft. (636 m)	1,000 ft. (303 m)

- Specifications subject to change without notice.
- 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.
- 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.

