

Vi2301

MaxiiCopper™ High-Speed Ethernet Extender over UTP

Features

- Extends Ethernet beyond 328 feet (100 m) limitation up to 3,000 feet (914 m) over UTP cables.
- Saves additional networking equipment costs and reduces installation time.
- **Extended Pass Through PoE (EPTP™) compatible with 802.3af and 802.3at Power over Ethernet (PoE).**
- Mega-Pixel Certified (MPC™) High data rate, ideal for high bandwidth requirements of Mega-pixel cameras, multiple IP camera 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
- Extending Networks in industrial environment
- CCTV System for Casinos, Airports, School Campuses

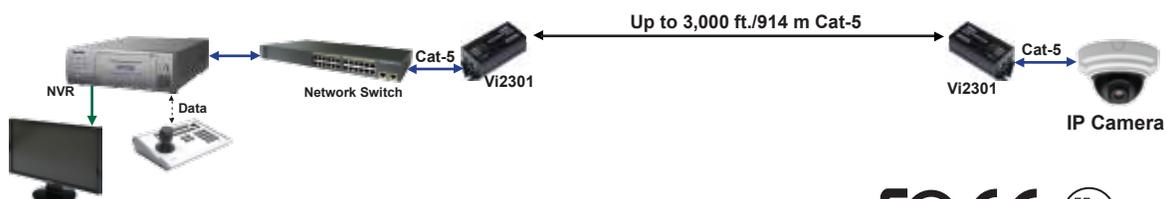


Vigtron's MaxiiCopper™ Vi2301 UTP Ethernet extender brings new performance standards to the growing need for high speed transmission of full bandwidth Ethernet and PoE power over extended distances. Its unique Symmetric Bandwidth (SBW™) assures full bandwidth transmission is maintained over the entire 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 one pair or 4 pairs of UTP.

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. This feature eliminates the need for local and remote site power supplies. Type tested under NEMA-TS2 environmental standards for extended temperature operation between -40°C to +75°C, the Vi2301 is the perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos, and many more. MaxiiCopper's Vi2301 is low power and easily fits inside most cameras housing and junction boxes. Best of all, the Vi2301 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 Vi2300 series is available in single, four, eight and sixteen channel combinations to meet every system application requirement.

Installation cost savings, proven performance, and major camera brand compatibility all go into making Vigtron's MaxiiCopper™ Vi2301 your best choice for extended distance data and power transmission.

Application Diagram



The Smart Choice for Transmission Solutions

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Technical Specification ¹

Electrical

Ethernet Interface	Standard 10/100BaseT
Data Rate	Dip switch selectable 10/100 Mb/s Full speed / full duplex at maximum rated distance
UTP ²	100 Ohm +/- 20%, Cat5 or better 10BaseT: up to 3,000 ft. (914 m) 100BaseT: up to 2,100 ft. (640 m)
Power Supply	12 VDC, 24 VAC, POE af/at @150 mA maximum 1.5 W with external power supply 2.5 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 RFC	IEEE 802.3af PoE, IEEE 802.3at PoE 768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility	IEEE 802.3af, IEEE 802.3at ⁵
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, UL
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
Vi2301	Single port UTP Ethernet Extender
Vi2304	4-port UTP Ethernet Extender
Vi2308	8-port UTP Ethernet Extender, 19", 1U
Vi2316	16-port UTP Ethernet Extender, 19", 1U
Vi0012	12 VDC Wall-mount Power Supply

System Configuration



Data and PoE Distance ^{2,4}

Data Rate	4-Pair ³ (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)

1. Specifications subject to change without notice.
2. 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.
3. 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.
4. System can be powered for 802.3af using PTP™ reference used is Class 2.
5. The 802.3at operation requires PSE to run in forced mode.



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