Vi3105 5-port 60W PoE Powered PoE Switch Installation Manual

MaxiiNet™ PoE Switches

Vigitron's MaxiiNet™ Vi3105 fixed managed 5-port PoE switch brings new performance standards to the growing need for high speed transmission of high speed Ethernet.

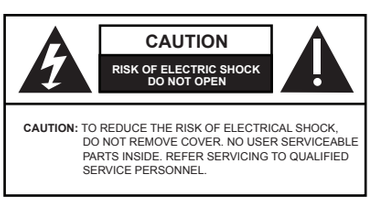
The Vi3105 can be powered by PoE sources up to 74W over extended UTP uplink or locally by the Vi1120 120W power supply to provide up to 37W to each port or up to 74W form two combined ports.

With an operating temperature range of -30°C to 75°C, the Vi3105 is the perfect solution for data and power transmission for aplications such as warehouses, parking lots, campuses, casinos. The Vi3105 is MegaPixel Certified (MPC™), type tested to network packet performance standards to assure you an error free and quality operation. Fixed managed L2 functions includes 802.1p QoS, support of 2k MAC addressing, learning, aging, and a non-blocking switch fabric.

Installation cost savings, proven performance, and major camera manufacturer compatibility all go into making Vigitron's MaxiiNet™ Vi3105 an ideal solution for IP video and PoE transmission.

Important Safety Warning

- Read and keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install in accordance with the manufacturer's instructions.
- This installation should be made by a qualified service person and should conform to all local codes.
- DO NOT bundle UTP or Coax signals in the same conduit as high-voltage wiring.
- To reduce the risk of fire or electrical shock, do not expose these products to rain, moisture, dripping or splashing.
- No objects filled with liquids, such as vases, shall be placed on Vigitron equipment.
- DO NOT install the unit in a place where the operating ambient temperature exceeds 70°C or is below - 10°C.
- Make sure that the external power supply output voltage is in the recommended range.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
- Protect the power cord from being walked on or pinched particularly at power source, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when a power supply cord or plug is damaged, liquid has been spilled, objects have fallen inside the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The main plug is used as the disconnect device and shall remain readily operable.

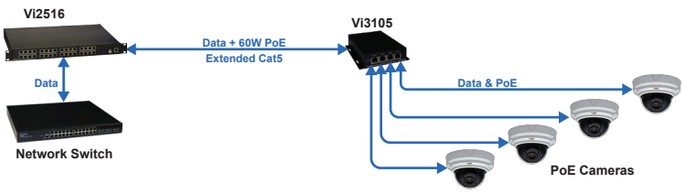


⚠ WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

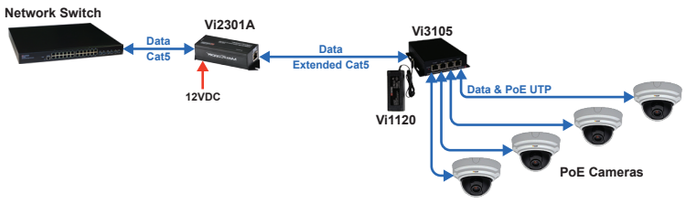
⚠ WARNING! - This apparatus is a Class I product. This product must be connected to a mains socket outlet thru an AC to DC Power supply.

⚠ WARNING! - The mains plug is used as the disconnect device and shall remain readily operable.

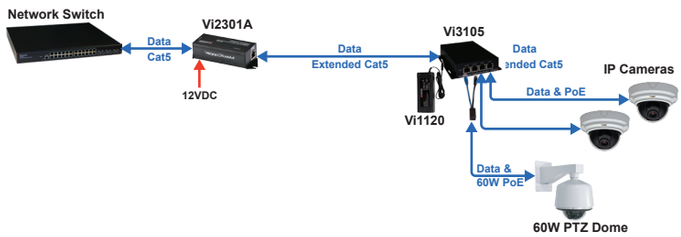
Application Drawings



The Vi3105 can receive data and 60W PoE power over extended distance UTP up to 2,000 ft. at 100Mbps and power up to 4 cameras.



The Vi3105 can receive data over extended distance UTP up to 2,000 ft. at 100Mbps and power 4 PoE cameras using local power supplies.



The Vi3105 can receive data over extended distance UTP up to 2,000 ft. at 100Mbps and power 60W PoE cameras using the Vi0015 combiner cable and a local power supply.

IP Camera-end Installation

The Vi3105 can be powered either by a local power supply or High power PoE provided from the headend.

Extended UTP Uplink w/ Remote PoE:
- Connect the extended Cat5/6 cable coming from the PoE switch or PoE midspan to the RJ45 connector at rear of Vi3105.
- Set 30W/60W based on the type of the remote PoE source.

Extended UTP Uplink w/ Local Power Supply:
- Connect the extended Cat5/6 cable coming from the PoE switch or PoE midspan to the RJ45 connector at rear of Vi3105.
- Connect the Vi1120 power supply to the power connector of the Vi3105.

Connect IP/PoE devices to the four ports of the Vi3105's front RJ45 connectors using a standard Cat5/6 cable of maximum 100m in length.

PoE power is allocated based on the required port power up to 37W starting with Port 1 having the highest priority. Once the total sum of the PoE power is allocated no more power will be available to remaining ports.

Each port will be able to provide up to 37W. If more power needed for approved IP devices use the Vi0015 combination cable to combine two ports. Starting with ports 1 and 2, connect the IP device to the Ethernet port of the Vi0015 cable.

PoE Switch/PoE Midspan-end Installation

The high power PoE to the Vi3105 can be provided either by a Vi25xx extended PoE Midspan or a High-power PoE midspan.

Using Vi25xx Exteded High-power Midspans:
- Connect the extended cable coming from the Vi3105 Uplink port to one of the 60W extended ports of the Vi25xx.
- Connect the standard corresponding port of the Vi25xx to the network switch using a standard Cat5/6 cable of maximum 100m in length.

PoE Switch/PoE Midspan-end Installation (continued)

Using Vi22xx High-power PoE Midspans:

- Connect the extended cable coming from the Vi3105 Uplink port to the extended port of a Vigitron Ethernet and PoE "Extender" Vi23xxA series such as Vi2301A or Vi2300A.
- Use a Vigitron high power Vi22xx Midspan and connect it to the 60W data and PoE port of the Midspan.
- Connect the corresponding port of the Midspan to to the network switch using a standard Cat5/6 cable of maximum 100m in length.

Technical Specifications*

Electrical

Ethernet Interface	Standard 10/100BaseT
UTP	100 Ohm +/- 20%, up to 3,000 ft. (914m)
Power Source	PoE: 802.3af (15.4W), 802.3at (30W), 60W External Power Supply: 57VDC @ up to 120W or 12VDC @ 0.3A for non-PoE operation
Status LEDs	Power: Power On Ethernet: Traffic, Link PoE: PoE Present
Connectors	Ethernet Interface: 5 x RJ45 Power: Circular power connector
RFC	2544 TCP/IP Packet Transmission
RFC	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility	IEEE 802.3af, IEEE 802.3at,60W High power PoE++

Regulatory

Safety	CE
Environmental	RoHS, WEEE
FCC	Part 15, Subpart B, Class B 2010
Emissions	EN5502:2006+A1:2007 EN 61000-3-2:2006+A1:2009+A2:2009 EN 55024: 1998+A1:2001+A2:2003

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -30°C to +75°C Storage: -40°C to +85°C

Mechanical

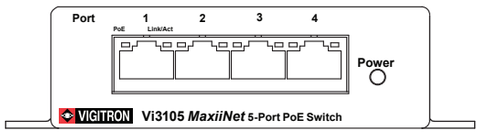
Dimensions	1.2x3.75x4.97 in., 3.0x9.5x12.6 cm (HxWxL)
Weight	0.64 lb (290 g)
Housing	Aluminum

Optional Accessories

Vi1120: 57VDC, 120W Power Supply
Vi0017: 48VDC, 40W Power Supply
Vi0012: 12VDC, 12W Power Supply for non-PoE Applications
Vi0015: Combiner Cable for 74W Operation

*Specifications subject to change without notice.

Status LEDs



LED Name	Color	Status	Function
Power	GREEN	OFF	Power is OFF
		ON	Power is ON
Traffic (Extended Side)	YELLOW	OFF	No Traffic
		FLASHING	Traffic
10/100 BaseT (Extended Side)	GREEN	ON	Connection is OK, 10BaseT Mode
	ORANGE	ON	Connection is OK, 100BaseT Mode
Link/Act (Standard Side)	YELLOW	OFF	No connection
		FLASHING	Connection is OK with Traffic
PoE	GREEN	OFF	PoE is OFF
		ON	PoE is ON

Ordering Information

Part No.	Description
Vi3105	5-Port Layer 2, 60W PoE Switch
Vi1120	120W, 57VDC Power Supply
Vi0017	40W 48VDC Power Supply
Vi0012	12W 12VDC Power Supply for non-PoE Applications
Vi0015	Combiner Cable for 74W PoE
Vi2301A	1-Port UTP Ethernet Extender
Vi2304A	4-Port UTP Ethernet Extender
Vi2308A	8-Port UTP Ethernet Extender
Vi2316A	16-Port UTP Ethernet Extender
Vi2508	8-Port UTP Ethernet Extender & PoE Midspan
Vi2516	16-Port UTP Ethernet Extender & PoE Midspan

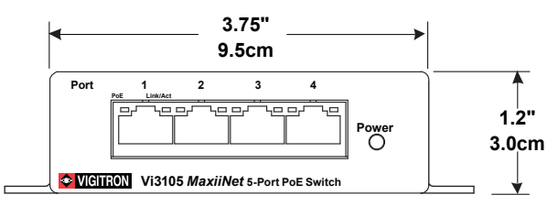
Limited Lifetime Warranty

Vigitron, Inc. warrants that all Vigitron products ("Product"), if used in accordance with these instructions, will be free of defects in material and workmanship for lifetime defined as the duration period of time until product end of life is announcement. After which Vigitron will continue to provide warranty services for a period of 3 years. Period covering valid warranty will be determined by proof of purchase in the form of an invoice from an authorized Vigitron dealer.

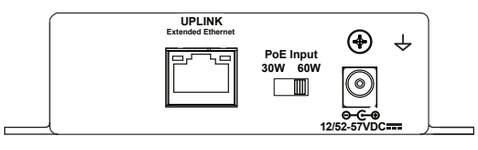
Warranty will only be provided for as long as the original end user purchaser owns the product. Warranty is not transferrable. At Vigitron's option, defective product will be repaired, replaced or substituted with a product of equal value. This warranty does not apply if, in the judgment of Vigitron, Inc., the Product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained not conforming to Product manual instructions, has been modified, or serial number removed or defaced. Repair by anyone other than Vigitron, Inc. or an approved agent will void this warranty. Vigitron, Inc. shall not under any circumstances be liable to any person for any incidental, indirect or consequential damages, including damages resulting from use or malfunction of the product, loss of profits or revenues or costs of replacement goods. The maximum liability of Vigitron, Inc. under this warranty is limited to the original purchase price of the Product only.

Prior to returning any defective Product, the end customer or the reseller from whom the end customer originally purchased the Product must obtain a Return Materials Authorization (RMA) number from Vigitron, Inc. All defective Products should be returned to Vigitron, Inc. with shipping charges prepaid. No collect shipments will be accepted.

Drawings



Front View



Rear View

VIGITRON
TEL (+1) 858-484-5209 • FAX (+1) 858-484-1205
7810 Trade Street, Suite 100, San Diego, CA 92121, USA • support@vigitron.com • www.vigitron.com
© Copyright 2015 Vigitron, Inc.