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





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.

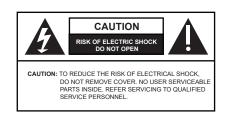
The Vi3105 can be powered by PoE sources up to 74W over extended UTP uplink or locally by the Vi1120 120W power supply to provide up to 37W to each port or up to 74W form two combined ports.

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 75°C or is below 40°C.
- Make sure that the external power supply output voltage is in the recommended
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including DVRs) 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.

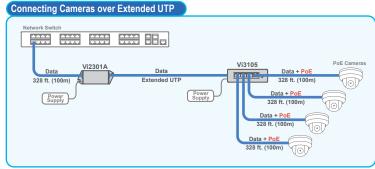


WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

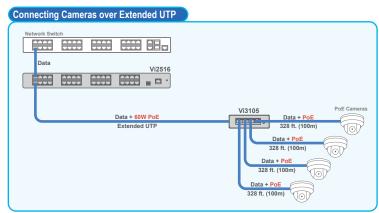
WARNING! - This apparatus is a Class I product. This product must be connected to a mains socket outlet thru an AC to DC Power supply.

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

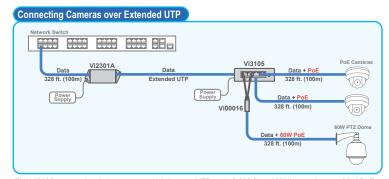
# **Application Drawings**



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



The Vi2516, Extended UTP Midspan, can provide PoE to power the Vi3105 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 60W PoE cameras using the Vi00016 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
- 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) PoE: 802.3af (15.4W), 802.3at (30W), 60W Power Source

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

Ethernet Interface: 5 x RJ45 Connectors

Power: Circular power connector **RFC** 2544 TCP/IP Packet Transmission 768 UDP, 2068 HTTP, 793 TCP RFC

791 IP, 1783 TFTP, 894 IP over Ethernet

PoE Compatibility IEEE 802.3af, IEEE 802.3at,60W High power PoE++

Regulatory

Safety CE

RoHS, WEEE Environmental

**FCC** Part 15, Subpart B, Class B 2010

EN5502:2006+A1:2007 **Emissions** 

EN 61000-3-2:2006+A1:2009+A2:2009 EN 55024: 1998+A1:2001+A2:2003

#### **Environmental**

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

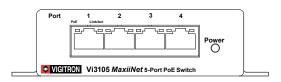
Vi1120: 57VDC, 120W Power Supply

Vi0017: 48VDC, 40W Power Supply
Vi0012: 12VDC, 12W Power Supply for non-PoE Applications

Vi00016: Combiner Cable for 72W 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	YELLOW	OFF	No Traffic
(Extended Side)		FLASHING	Traffic
10/100 BaseT	GREEN	ON	Connection is OK, 10BaseT Mode
(Extended Side)	ORANGE	ON	Connection is OK, 100BaseT Mode
Link/Act	YELLOW	OFF	No connection
(Standard Side)		FLASHING	Connection is OK with Traffic
PoE	GREEN	OFF	PoE is OFF
		ON	PoE is ON

# **Ordering Information**

Part No. Description

Vi3105 5-port 60W PoE Powered PoE Switch

# **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

## **Drawings**

