Vi3003WP L2 Drop & Insert 1G 60W PoE 3-Port Switch User's Manual





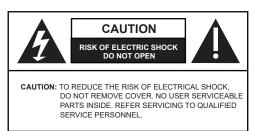
The Vi3003WP is a 3-port Layer 2 weatherproof Ethernet and PoE switch providing drop and insert capability for connecting several IP devices along a single cable run. The Vi3003WP provides a cost effective method for increasing distances beyond the standard Ethernet limit of 328 feet (100m) for 10/100/1G Mbps Ethernet. Multiple units can be cascaded to provide up to nine IP cameras to be connected to a single network switch port over distances of up 3,000 feet (909m).

For small systems, the Vi3003WP's Layer 2 network capability can eliminate the need for network switches saving costs and rack space. It also can significantly decrease network switch costs by increasing the capacity of a 24-port switch to handle up to 216 cameras and an 8-port switch up to 72 cameras. As a mini network switch, the Vi3003WP avoids the potentials for transmission collisions by complying with IEEE standards. Its ability to automatically sense the data rate up to 1000Mbps (1Gbps) also makes it the perfect solution for cost effectively extending network to network communications or between network switches requiring high speeds transmission.

The Vi3003WP can be powered from a single PoE source or a local power supply. Additional power up to 60W can be added at any point along the cable run where power outlets are available providing the ability to power IP cameras up to 60W.

Important Safety Warning

- Read these instructions.
- 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 tempera ture exceeds 75°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 plugs, 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 a power
 supply cord or plug is damaged, liquid has been spilled, or objects have
 fallen into the apparatus, the apparatus has been exposed to rain or
 moisture, does not operate normally, or has been dropped.
- The power plug and the PoE input cable are used as the disconnect device and shall remain readily



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 main socket outlet through an AC to DC Power supply.

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

Application Drawings

Providing PoE to 2 Cameras using a Local Power Supply

Network Switch

Prover Supply

Vi3003WP

Data + 60W PoE

328 ft. (100m)

Data + 30W PoE

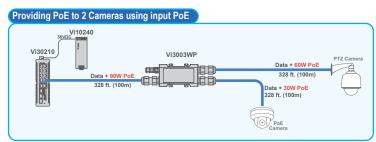
328 ft. (100m)

Data + 30W PoE

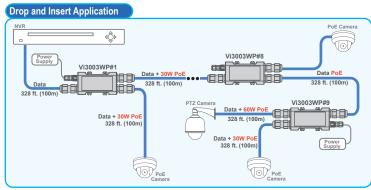
Supply

Data + 30W PoE

Vi3003WP allows for the transmission of two cameras over a single cable run or adding a new camera close to an existing camera.



Vi3003WP allows for the transmission of two cameras over a single cable run or adding a new camera close to an existing camera. The PoE Midspan provides power to the Vi3003WP and both cameras.



A total of 9 IP addresses can be accessed on a single cable run. eliminating the need for network switches.

Installation (Vi3003WP Powered by PoE)

a) Port-3 (Tap, PoE-Out)) Connection:

Use a standard Cat5/6 cable of maximum 100m in length to connect the camera to the Vi3003WP.

- Connect the RJ45 connector of the Cat5/6 cable IP camera's RJ45 connector
- Connect the other end of the Cat5/6 cable to the waterproof connector of Port3 of Vi3003WP's. This port can $\,$ provide up to 30W PoE power depending on the input PoE and the total load on the unit.

b) Port-2 (PoE-Out) Connection:

This port can be used to connect to another Vi3003WP or a 60W camera.

- If you want to daisy-chain this unit with another Vi3003WP, connect waterproof connector of Port-2 of Vi3003WP to the Port-1 of the next Vi3003WP using a standard Cat5/6 cable of maximum 100m in length. Port-2 will provide 1G Ethernet. - If you want to connect this unit to a PoE++ camera, connect waterproof connector of Port-2 of Vi3003WP to the RJ45 connector of the IP camera using a standard Cat5/6 cable of maximum 100m in length. This port can provide up to 60W PoE power depending on the input PoE and the total load on the unit.

Caution

Do not connect a non-PoE device to the Port-2 of the Vi3003WP. Doing so may damage the non-PoE device.

If it is necessary to connect a non-PoE device to Port-2, use a Vi0025 between Port-2 and RJ45 connector of the non-PoE device.

c) Port-1 (PoE-In) Connection:

- Connect waterproof connector of Port-1 of Vi3003WP to the PoE switch or a high power PoE source using a standard Cat5/6 cable of maximum 100m in length. This port can receive up to 74W PoE and 1Gbps Ethernet data.



Installation (Vi3003WP Powered by Local Power Supply)

a) Port-3 (Tap) Connection:

- As "a" in previous section.

b) Port-2 (PoE-Out) Connection:

- As "b" in previous section.

c) Port-1 (PoE-In) Connection:

 Connect waterproof power connector the of Port-1 of Vi3003WP to the network switch using a standard Cat5/6 cable of maximum 100m in length.

d) Power Connection:

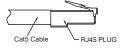
- Connect waterproof power connector to Vi1120, 120W desktop power supply for using full PoE capacity of Vi3003WP.

If the unit connected to Port-1 does not require PoE, a Vi0012 can be used for just powering the Vi3003WP.

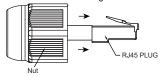
RJ-45 Installation Instruction

Installing cable and connector is critical for maintaining the IP 67 performance of this product. Please follow instructions carefully.

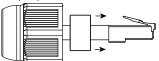
1. Terminate the Cat5 cable with RJ45 plug.



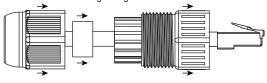
2. Insert the cable through the nut.



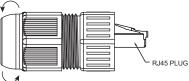
t open the seal and insert the cable through the seal.

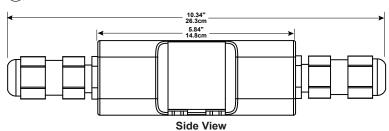


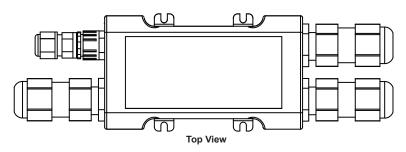
Insert the cable through the gasket

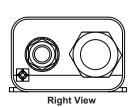


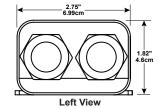
Tighten the nut to seal the cable

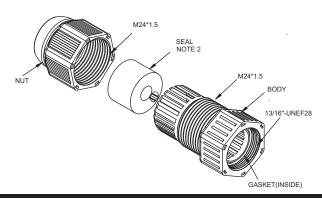












Ordering Information

Description
IP67 1G Drop and Insert 3-Port 60W PoE Switch

Technical Specifications*

Electrical

PoE Rating

Port 1 (PoE In): 60W Port 2 (PoE Out): 60W Port 3 (Tap, PoE Out): 802.3af (15.4W), 802.3at

(30W)

Network Connection (3) RJ-45 IEC 60603-7

Cat 5/5e/6 Wiring Support **Power Consumption**

328ft (100m) per link Supported Distance Data Rate

Auto Configuring
Port 1: 10/100/1000Base-TX
Port 2: 10/100/1000Base-TX Port 3 (Tap): 10/100/1000Base-TX RFC 768 UDP, RFC 2068 HTTP

Data Interfaces and Compliances RFC 793 TCP, RFC 791 IP

RFC 1783 TFTP, RFC 894 IP over Ethernet RFC 2544 TCP/IP Packet Transmission

802.3ab, 802.3z, 802.3af, 802.3at, 802.1p, 802.1Q, 802.1D, 802.1s, 802.3u, 802.3x, **IEEE Compliances**

802.3w

Service Compliance IPv4 Type of Service (TOS) and

Differentiated Services (Diff-Serv) IPv6 Traffic Class

VLAN Support 4,096 Addresses Jumbo Frame Up to 10,000 bytes

Regulatory

Safety CE. FCC Environmental RoHS, WEEE

Environmental

Humidity 0 to 95%, non-condensing

Operating: -40°C to +75°C per NEMA-TS2 testing Temperature

Storage: -40°C to +85°C

Mechanical

Dimensions 1.82x2.75x5.84 in., 4.6x6.99x14.8 cm (HxWxL)

Weight 1.38 lb, 626 g

ABS plastic, UL rating of 94V-0 Material

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 announced. 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 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. 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.



^{*}Specifications subject to change without notice.