Vi3002 Hardened Ethernet and 60W PoE Repeater Installation Manual





Vigitron's MaxiiNet™ Vi3002 is an Ethernet and 60W PoE repeater that provides a cost effective method for extending distances beyond the Ethernet limit of 328 feet (100m) for IT or CCTV installations. Each unit can extend Ethernet and PoE for 328 feet (100m). Up to 8 units can be combined to achieve a distance up to 3,000 feet (909m) for IP video and PoE transmission. The Vi3002 is a high performance device that meets the demands for the highest PoE powered PTZ domes and LED lighting eliminating the need for local power.

The Vi3002 is designed for the operating temperature range of -20°C to +75°C. It uses PoE only and its Pass-Through-PoE (PTP™) eliminates the need for local power supplies.

It is compact in size and easy to install. The Vi3002 is very cost effective and is a perfect solution for any extended IP transmission applications.

Important Safety Warning

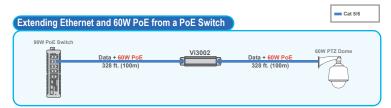
- Read and keep these instructions.
- Heed all warnings
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install in accordance with the manufacturer's instructions.
- This installation should be made by a qualified service person and should conform to 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.



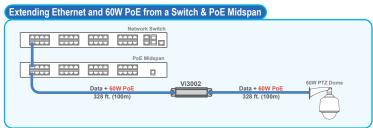
WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

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

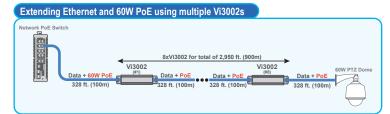
Application Drawings



A single Vi3002 extendends Ethernet and PoE from a PoE switch for total Distance of 656 ft.

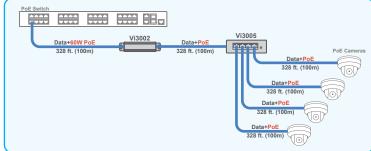


A single Vi3002 extendends Ethernet and PoE from a network switch and a PoE Midspan for total Distance of 656 ft. (200m).



Up to 8 x Vi3002 can be used in series to extend Ethernet and PoE for up to 2,950 ft. (900m).

Connecting Multiple PoE Cameras at Extended Distances



The Vi3002 can be used to connect multiple PoE cameras at extended distances.

PoE Switch-end Installation

a) A single Vi3002:

 Connect one of the RJ45 connectors of the Vi3002 to a standard Cat5/6 cable of maximum 328 feet (100m). Connect the other end of the cable to the Ethernet port of the a PoE Switch or PoE Midspan.

IP Camera-end Installation

- Connect of the other RJ45 connector of the Vi3002 to a standard Cat5/6 cable of maximum 328 feet (100m).
- Connect the other end of the Cat5/6 cable to the Ethernet port of the the IP camera or any other PoE device.



Technical Specifications*

Electrical

PoE Standard 802.3af (15.4W), 802.3at (30W), 802.3bt

(60W)

Network Connection 2 x RJ-45 IEC 60603-7
Wiring Support 2 or 4 pair Cat 5/5e/6
Power Consumption 1W (using PoE)

PoE IEEE 801.3af/at/bt Compliant up to 90W

LED PoE: Green

Link and Traffic: Orange

Data Rate 10/100Base-TX (10/100Mbps), Auto

configuring

Data Interfaces and Compliances RFC 768 UDP, RFC 2068 HTTP RFC 793 TCP, RFC 791 IP

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

802.3af, 802.3at, 802.3bt

Regulatory

NEC Code For 3, 3 ½, and 4 inch Conduit at 40% Fill

Safety CE, FCC Environmental RoHS, WEEE

Environmental

Humidity 0% to 95%, non-condensing

Temperature Operating: -40°C to 75°C

Storage: -40°C to 85°C

Mechanical

Dimensions 0.9x1.0x2.7 in., 2.3x2.5x6.9 cm (HxWxL)

(without tabs)

Weight 0.01 lb (4.5g)
Housing Material Extruded Aluminum

3.7" 9.4 cm 3.36" 8.54 cm 2.7" 6.86 cm Right View Top View Left View



Ordering Information

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Part No.	Description
Vi3002	Ethernet and 60W PoE Repeater

Ordering Information

Part No.	Description
	IP67 Ethernet and 60W PoE Repeater
Vi30002U	Ethernet and 90W PoE Repeater

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.



^{*}Specifications subject to change without notice