Vi3602 Gigabit Ethernet and 30W PoE++ Repeater User's Manual





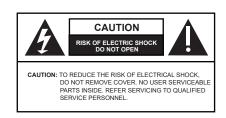
The Vi3602 is an Ethernet and 30W PoE repeater that provides a cost effective method for increasing distances beyond the Ethernet limit of 328 feet (100m) for IT or CCTV installations at network speeds up to 1000Mbps. Each unit can extend Ethernet and PoE for 328 feet (100m). Multiple units can be cascaded to reach the desired distances. The Vi3602 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 or providing the ability to add PoE power.

Removable mounting brackets make installation an easy process. The Vi3602 is the perfect solution for any IP transmission application. Up to 4 units can be combined to achieve a distance of 1,450 feet (442m) for IP video, PoE, and data transmission.

It is an ideal solution for extending data, video, and power from PoE switches, Midspans, Power Source Equipment (PSE) and extending communications between network switches.

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
- 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 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

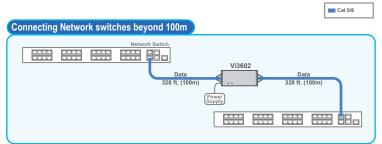


MARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

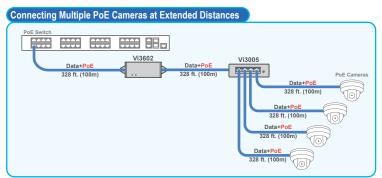
WARNING! - This apparatus is a Class I product. This product must be connected to a main socket outlet through an AC to DC Power supply.

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

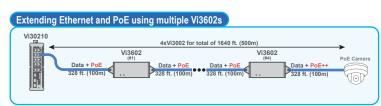
Application Drawings



The Vi3602 can extend 1G connection of network switches beyond the 100 meters of standard Ethernet



The Vi3602 can be used to connect multiple PoE cameras at extended distances.



Up to 8 x Vi3002 can be used in series to extend Ethernet and PoE for up to 1640 ft. (500m).

Multiple Vi3602 can be used to extend Ethernet and PoE The maximum reach of PoE will be:

PoE	Distance	# of Vi3602	
20W 16W 11W	850 ft. (259m) 1,150 ft. (350m) 1,450 ft. (442m)		

Installation (Powered by PoE)

a) Port-2 (PoE Out) Connection:

- Connect the IP camera's RJ45 connector to Port-2 of Vi3602 using a standard Cat5/6 cable of maximum 100m in length. This port can provide up to 30W PoE power depending on the input PoE.

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

- Connect Port-1 of Vi3602 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 30W PoE and data 1Gbps.

Installation (Powered by Local Power Supply)

a) Port-2 (Poe Out) Connection:

- As "a" in previous section.

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

- Connect Port-1 of Vi3602 to the network switch using a standard Cat5/6 cable of maximum 100m in length.

c) Power Connection:

- Connect power connector from Vi1120 120W desktop power supply for using full PoE capacity of Vi3602. If the application does not provide PoE, a Vi0014 can be used for just powering the Vi3602.



Technical Specifications*

Electrical

PoE Rating Port 1 (PoE In): 30W Port 2 (PoE Out): 30W

802.3af (15.4W), 802.3at (30W) Power Transmission

Standard

Network Connection (2) RJ-45 IEC 60603-7 Local Power Input Max. Up to 40W @ 48V

Cat 5e/6 Wiring Support **Power Consumption** 3W

Extended Distance 328ft (100m) per link

Supported

I FD

Power: Green 30W PoE Output: Orange

Port 1 (Uplink): 1G (Green), Link/Act. (Yellow)

Port 2: 1G (Green), Link/Act. (Yellow)

Data Rate

100Base-TX (1000Mbps), Auto Configuring Port 1: 10/100/1000BaseTX Port 2: 10/100/1000BaseTX

RFC 768 UDP, RFC 2068 HTTP RFC 793 TCP, RFC 791 IP RFC 1783 TFTP, RFC 894 IP over Ethernet Data Interfaces and Compliances

RFC 2544 TCP/IP Packet Transmission IEEE 802.3af, 802.3at, 802.3z

802.3ab, 802.3z, 802.3af, 802.3at **IEEE Compliances**

802.1p, 802.1Q, 802.1D, 802.1s, 802.3u, 802.3x, 802.3w

IPv4 Type of Service (TOS) & Differentiated Services (Diff-Serv) IPv6 Traffic Class Services Compliance

VLAN Support Services Up to 10,000 Bytes

Regulatory

NEC Code For 3, 3 1/2, and 4 inch Conduit at 40% Fill

Safety CF FCC Environmental RoHS, WEEE

Environmental

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

Mechanical

Dimensions 0.97x1.76x4.12 in., 2.5x4.5x10.5 cm (HxWxL)

Weight 0.26 lb (117a) Extruded Aluminum Housing Material

Ordering Information

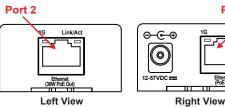
Part No.		Description	
	Vi3602	Ethernet 1G PSE 30W Repeater	

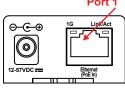
Related Products

Part No. Description

	Vi3002	Ethernet and 60W PoE Repeater	
	Vi3002W	IP67 Weatherproof Ethernet and 60W PoE Repeater	
Vi30002U		Ethernet and 90W PoE Repeater	

Status LEDs





LED	Color	Status	Function
Power	Green	OFF	The Vi3602 is off
rowei		ON	The Vi3602 is on
	Green	OFF	Port-2 PoE is off
30W PoE		ON	Port-2 is delivering PoE
1 02		FLASHING	PoE voltage is out of range
	Green	OFF	10/100Mbps connection when linked
Port	Green	ON	1000Mbps connection
1, 2	Orange	OFF	No link
	Orange	ON	Link flashes with activity

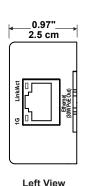
Limited Lifetime Warranty

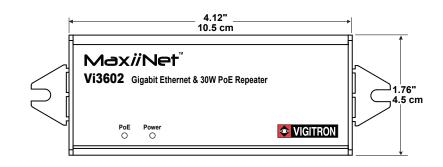
Vigitron, Inc. warrants that all Vigitron products ("Product"), if used in accordance with these instructions, will be free of defects in material and workmanship for lifetime defined as the duration period of time until product end of life is announcement. After which Vigitron will continue to provide 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.

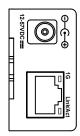
Prior to returning any defective Product, the end customer or the reseller from whom the end customer originally purchased the Product must obtain a Return Materials Authorization (RMA) number from Vigitron, Inc. All defective Products should be returned to Vigitron, Inc. with shipping charges prepaid.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

Drawings





Top View



Right View



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^{*}Specifications subject to change without notice