Vi50000 and Vi50001 PoE Media Converter Installation

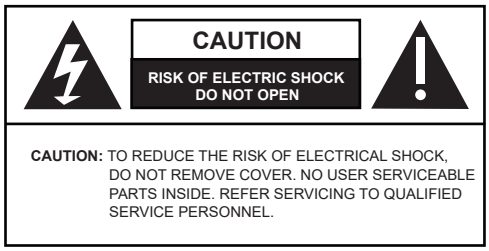
Vigitron's Vi50000 and Vi50001 work together to form a media converter that enables Ethernet signals to be transmitted over fiber optic cables to meet long distance transmission applications or reusing existing analog fiber connections for IP applications.

The use of SFP fiber modules resulting in compatibility with all major single-mode and multi-mode fiber optics cables to achieve transmission distances depending on the cable and SFP. The Vi50000 provides IEEE 802.3af/at PoE up to 30W to the connected IP device such as IP camera when used with appropriate power supplies. The Vi50001 can be powered locally or by a PoE source.

The Vi50000/Vi50001 is an ideal solution for converting existing analog fiber infrastructures to IP systems. It provides a unique, reliable, and cost effective solution to combine a variety of transmission methods to meet any application requirement.

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 recom mended range.
- 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 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 is used as the disconnect device and shall remain readily operable.



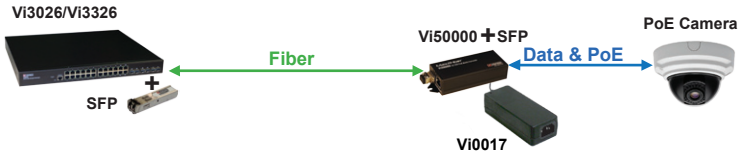
⚠ WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

⚠ 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.

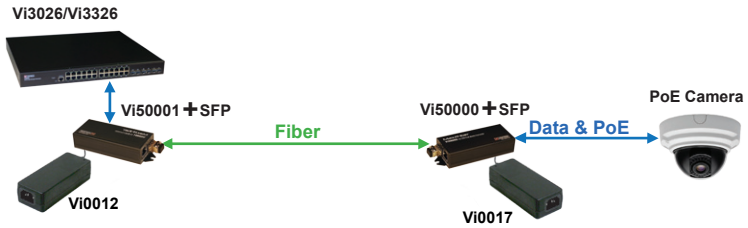
⚠ WARNING! - The mains plug is used as the disconnect device and shall remain readily operable.

Application Drawing

The Vi50000 connects to the optical port of Network Switch



The Vi50000 connects to a Vi50001



IP Camera-end Installation

- Insert a suitable 1000MBps SFP into the SFP socket of the Vi50000. The SFP needs to match the specification of the fiber optics cable.
- Connect the fiber connector of the optical wire to the SFP.
- If the IP Camera is non-PoE use an approved 12VDC or 48VDC power adapter to power the Vi50000.
- If the IP Camera is a PoE enabled use the Vi0017 or another approved 48VDC power adapter to power the Vi50000.
- Connect the IP camera's RJ45 connector to the "10/100/1GBaseT Ethernet" port

Ethernet Switch/NVR-end Installation

- Connect an approved 12VDC power supply to the power connector of Vi50001 if there is no PoE available. A power adapter connector is provided to simplify connection.
- Connect the RJ45 connector of the Ethernet switch to the 10/100/1GBaseT Ethernet port of Vi50001 using a standard Cat5/6 cable of maximum 328 feet (100 m) in length.
- Connect one end of the long fiber optic cable to a SFP module, then connect the SFP module to the SFP socket of Vi50001.
  The Ethernet link, Fiber link, activity LEDs should be "ON" and "Blink" to indicate the status of each port.

Technical Specifications*

Electrical

Ethernet Interface	Standard 10/100/10000BaseT
Ethernet Rate	Auto Negotiates 10/100/1G Mb/s
Fiber Optics	SFP socket
Input Power	12VDC / 48VDC (when provides PoE)
PoE	802.3af/at up to 30W
Consumption	2W maximum
Connectors	SFP Interface: SFP Socket Ethernet Interface: RJ-45 Connector Power: Pluggable Terminal Block

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -40°C to +80°C Storage: -40°C to +85°C

Mechanical

Dimensions (HxWxL)	Vi50000: 0.97 x 1.75 x 4.26 in., 2.46 x 4.45 x 10.8 cm Vi50001: 0.97x1.75x3.93 in., 2.5x4.45x10 cm
Weight	Vi50000: 0.235 lb, 107 g Vi50001: 0.22 lb, 102 g
Material	Extruded Aluminum

Accessories

12 VDC wall-mount power supply (optional)

48 VDC wall-mount power supply (optional)

*Specifications subject to change without notice.
**Distance figures are obtained using in house testing mirroring installations. Factors such as cabling, connections, use of power and environmental conditions may affect actual distances and should be taken into consideration.

Status LEDs

LED Name	Color	Status	Function
Power	GREEN	OFF	Power is OFF
		ON	Power is ON
PoE (Vi50000 Only)	GREEN	OFF	No PoE
		ON	PoE
Fiber Port	YELLOW	OFF	Fiber Link is OFF
		ON / FLASHING	Fiber Activity
Ethernet Port	GREEN	OFF	10/100Mbps Connection When Linked
		ON	1000Mbps Connection
Ethernet Port	ORANGE	OFF	No Link
		ON	Link Flashes With Activity

Ordering Information

Part No.	Description
Vi50000	**Single Port 1G Media Converter**
Vi50001	**Ethernet to Fiber 1G (1000Mbps) Media Convertor**
Vi0012	**12VDC @ 1 amp**
Vi0017	**40W @ 48VDC Power Supply**
Vi1120	**120W @ 56 Volts Power Supply**
Vi00850MM-H	**850nm MM SFP (multi-mode), Hardened**
Vi01310SM-H	**1310SM SFP (single-mode), Hardened**

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.

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