Vi5001 Fiber Media convertor with 30W PoE Installation

MaxiiFiber™

Vigitron's Vi5001 is 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 Vi5001 also provides IEEE 802.3af/at PoE up to 30W to the connected IP device such as IP camera swhen used with appropriate power supplies.

The Vi5001 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 temperature exceeds 70° 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 (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 powe plug is used as the disconnect device and shall remain readily operable.

**CAUTION**

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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
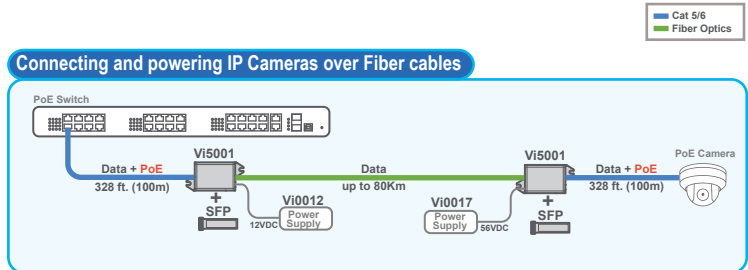
The Vi5001s are used for long distance high bandwidth transmission applications. The Vi5001 provides up to 30W PoE power to meet the high power requirements. of PoE
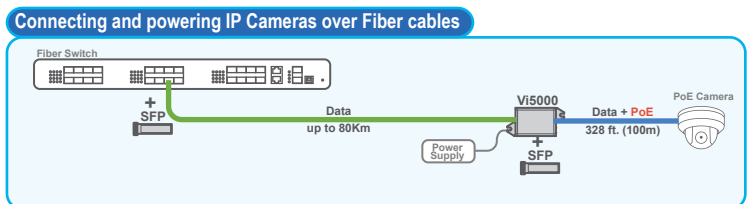
By using the SFPs, the Vi5001 will be compatible with most installed fiber types and can be directly connected to SFP modules installed in network switches.

IP Camera-end Installation

- Insert a suitable 100MBps SFP into the SFP socket of the Vi5001. 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 Vi5001.
- If the IP Camera is a PoE enabled use the Vi0017 or another approved 48VDC power adapter to power the Vi5001.
- Connect the IP camera RJ45 connector to the "10/100BaseT Ethernet" port of Vi5001 using a standard Cat5/6 cable of maximum 100m in length.

Ethernet Switch/NVR-end Installation

- Connect an approved 12VDC power supply to the power connector of Vi5001. A power adapter connector is provided to simplify connection.
- Connect the RJ45 connector of the Ethernet switch to the 10/100BaseT Ethernet port of Vi5001 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 Vi5001.

The Ethernet link, Fiber link, activity LEDs should be "ON" and "Blink" to indicate the status of each port.

Technical Specifications*

Electrical

Ethernet	Standard 10/100Base, Auto-Negotiation, Auto MDI/MDI-X
Fiber Compatibility	Multimode Fiber Optical Cable: 50/125um Multimode Fiber Optical Cable: 62.5/125um Single Mode Fiber Optical Cable: 9/125um Wave Division Multiplexing
Distance	Based on cable and SFP
Fiber Connection	LC based on SFP
Connectors	Ethernet: RJ-45 Fiber: SFP socket compliant to MSA standards Power: Detachable Terminal block
Status LED	Power Ethernet: Link/Traffic, 10Mbps/100Mbps Fiber:
PoE Compatibility	IEEE 802.3af/802.3at up to 30W
Data Interface	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
Standards	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3af, IEEE 802.3at
Power supply	12W @ 200mA for non-PoE operation 48-57V for PoE operation

Regulatory

Safety	CE, FCC
Environmental	RoHS, WEEE

Environmental

Humidity	0% to 95%, non-condensing
Temperature	Operating: 0°C to +70°C Storage: -40°C to 85°C

Mechanical

|	
Dimensions	0.97x1.75x2.7 in., 2.5x4.5x6.8 cm (HxWxL)
Weight	0.17 lbs (78g)
Housing Material	Extruded Aluminum

*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.
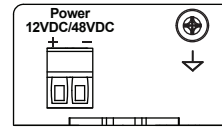
Status LEDs

LED Name	Color	Status	Function
Power	GREEN	OFF	Power is OFF
		ON	Power is ON
PoE	GREEN	OFF	No PoE
		ON	PoE
Fiber Port	YELLOW	OFF	Fiber Link is OFF
		ON / FLASHING	Fiber Activity
Traffic (Standard Side)	GREEN	OFF	No connection
		FLASHING	Connection is OK with Traffic
Link (Standard Side)	YELLOW	OFF	No connection
		ON	Connection is OK

Drawings
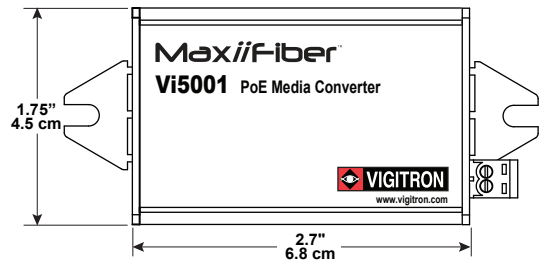
Top View
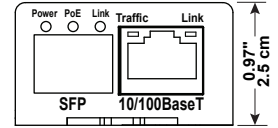
Right View   **Left View**
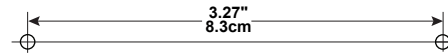
Mounting Pattern

Ordering Information

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Part No.	Description
Vi5001	Single Port Media Convertor with PoE Source

Related Products

Part No.	Description
Vi5004	4-Port Media Convertor with PoE Source

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.