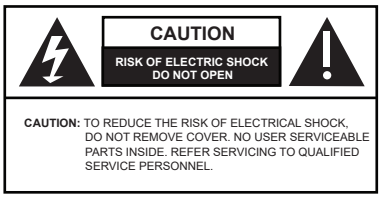
Vi5004 4-Port Media Converter Installation Manual

Vigitron's Vi5004 is a 4-port fiber optic media convertor that enables Ethernet signals to be transmitted over fiber optic cables. It enable UTP Ethernet to connect to fiber to meet long distance transmission requirement or where fiber is already installed. The use of fiber SFPs enables compatibility with all major single and multimode fiber optics cables to achieve transmission distances depending on the cable and SFP type. The Vi5004 can use virtually any MSA compliant SFPs.

The Vi5004 is an ideal solution for converting existing analog fiber infrastructures to IP systems. It provides a unique, reliable, and cost effective solution to meet long distance transmission application requirements. Up to four Vi5004 units can be instaled in a Vi5000R rackmount shelf to povide up to 16 ports of rack mountable fiber optics media converters.

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 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 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.



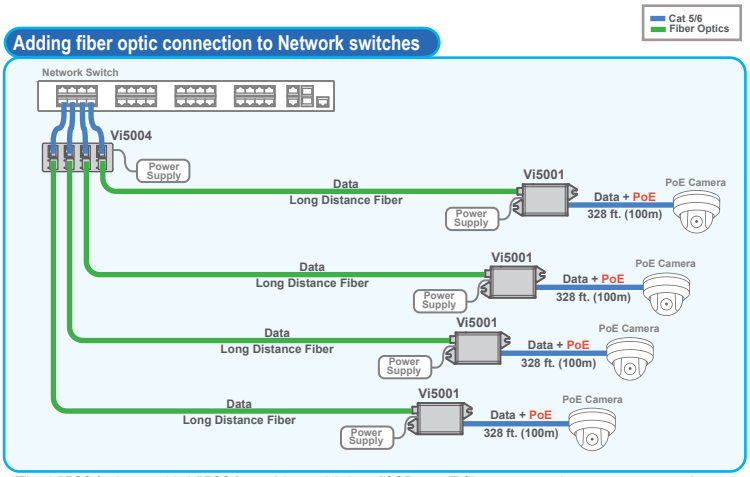
⚠ WARNING! - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

⚠ 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.

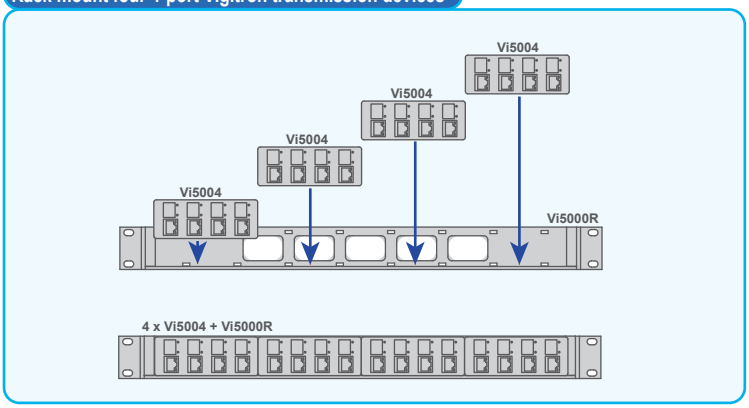
Application Drawing

Adding fiber optic connection to Network switches



The Vi5004 along with Vi5001 enables addging 100Base-T fiber connection to any network switch. Each port of Vi5004 can be individually powered by PoE or local power supply SFPs need to be added to Vi5004 and Vi5001 to match the fiber optic cables.

Rack mount four 4-port Vigitron transmission devices



The Vi5000R provies an easy way to rack mount up to four Vi5004s to make a 16 port media converter. The Vi5000B can be used to cover empty spaces of Vi5000R.

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 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 Vi5004. A power adapter connector is provided to simplify connection.
- Connect the RJ45 connector of the Ethernet switch to the 10/100BaseT Ethernet port of Vi5004 using a standard Cat5/6 cable of maximum 328 feet (100 m) in length.
- Insert a suitable 100MBps SFP into the SFP socket of the Vi5004. The SFP needs to match the specification of the fiber optics cable.
- Connect one end of the long fiber optic cable to a SFP module.

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

Technical Specifications*

Electrical

Ethernet	Standard 10/100BaseT, Auto-Negotiation, Auto MDI/MDI-X (x4)
Fiber Compatibility	Multimode Fiber Optical Cable: 50/125um Multimode Fiber Optical Cable: 62.5/125um Single Mode Fiber Optical Cable: 9/125um
Distance	Based on cable and SFP
Fiber Connection	LC based on SFP (x4)
Connectors	Fiber: SFP sockets compliant to MSA standards Ethernet: 4 x RJ45 Power: Detachable Terminal Block
Status LED	Power Ethernet: Link/Traffic, 10/100Mbps Fiber Active
Data Interfaces & 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
Standards	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3af, IEEE 802.3at
Power	12VDC @ 0.7A

Regulatory

Safety	CE
Environmental	RoHS, WEEE

Environmental

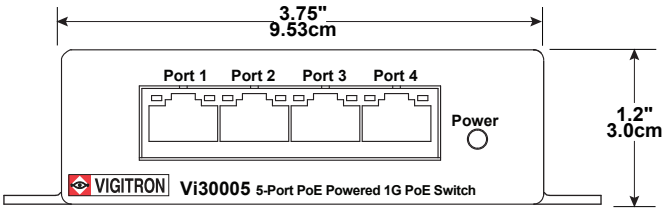
Humidity	0 to 95%, non-condensing
Temperature	Operating: 0°C to +70°C Storage: -40°C to +85°C

Mechanical

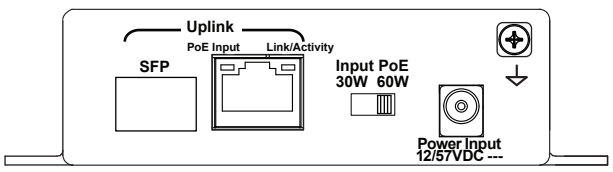
Dimensions	1.65 x 2.69 x 4.08 in., 4.19 x 6.83 x 10.36 cm (HxWxL)
Weight	0.59lb (266g)
Housing	Extruded Aluminum

*Specifications subject to change without notice.

Mechanical Drawings



Front View



Rear View

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

Ordering Information

Ordering Information

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

Related Products

Part No.	Description
Vi5001	Single 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.

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