

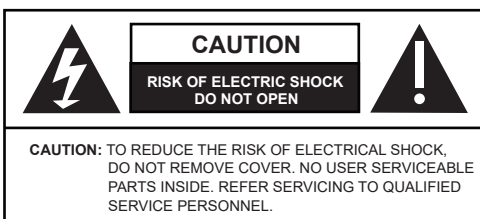


Vigiton's Vi50004 is a 4-port fiber to UTP media converter enabling Ethernet signals to be transmitted over different types of fiber optic cables. The use of SFP fiber modules results in compatibility with all major single and multimode fiber optics cables to achieve desired transmission distances depending on the type of cables and SFPs. The Vi50004 is an efficient solution for connecting uplinks from multiple network switches to headend in IDF to MDF system configurations using fiber cables. The Vi50004 expands fiber transmission capacity for most switches that have just two fiber ports. With the growing number of cameras requiring 1G connection, the Vi50004 provides an efficient solution for systems that multiple of these cameras are used.

Up to four Vi50004 can be placed in a Vi5000R to create rackmountable headend solutions from 4 to 16 ports providing cost effective solutions for any size applications.

## Important Safety Warning

- Read and keep and follow these 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.
- 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 Vigiton 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 that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs 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.

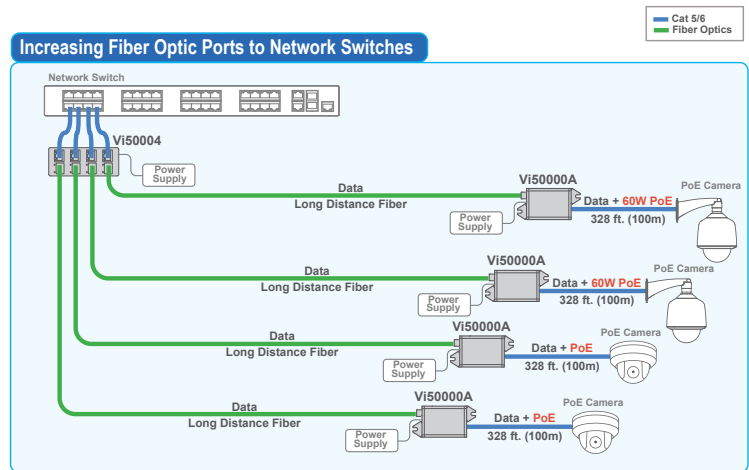


**! WARNING!** - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

**! 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 Vi50004 along with Vi50000A enables adding 100/1000 Base-T fiber connection to any network switch. Each port of Vi50004 can be individually powered by PoE or local power supply SFPs need to be added to Vi50004 and Vi50000A to match the fiber optic cables.

## IP Camera-end Installation

- Insert a suitable 1000Mbps SFP into the SFP socket of the Vi50000A. 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 Vi50000A.
- If the IP Camera is PoE enabled use the Vi0017 or another approved 48VDC power adapter to power the Vi50000A.
- Connect the IP camera RJ45 connector to the "10/100BaseT Ethernet" port of Vi50000A using a standard Cat5/6 cable of maximum 100m in length.

The link LED on the 10/100 connector should be "ON" to indicate proper connection between the camera and Vi50004.

## Ethernet Switch/NVR-end Installation

- Connect an approved 12VDC power supply to the power connector of Vi50004. An Octopus power cable is provided to simplify connection. Each port can also use PoE if provided from switch.
- Connect the RJ45 connector of the Ethernet switch to the 100/1000BaseT Ethernet port of Vi50004 using a standard Cat5/6 cable of maximum 328 feet (100 m) in length.
- Insert a suitable 1000Mbps SFP into the SFP socket of the Vi50004. 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.

**Note:** As no standards exist between SFP and network switches the switch port bandwidth setting may have to be fixed at 1000Mbps (1G).

## Technical Specifications\*

### Electrical

Ethernet	Standard 100/1000BaseT, Auto-Negotiation, Auto MDI/MDI-X (x4)
Fiber Compatibility	Multi-Mode Fiber Optical Cable: 50/125um Multi-Mode 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 (x4)
Connectors	Fiber: SFP sockets compliant to MSA standards Ethernet: 4 x RJ45 Power: 4 x 5mm round power connector
Status LED	Power: Green LED Ethernet: Link/Traffic, 100/1000Mbps
Compliances	Data Interfaces & 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 802.3ab 1000Base-T, IEEE 802.3 10/100Base-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
Octopus Cable	Power supply cable (included)

### Optional Accessories\*\*

Vi0014, Power Supply  
Vi5000R, Rackmount Adapter to Holds Up to (4) Vi50004s  
Vi5000B, Blank Panel for Vi5000R

\*Specifications subject to change without notice.

\*\*Sold separately

\*\*\*There is no standard method for reading SFP bdata rate. Different SFPs may not sense the differences



## 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

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#### Part No. Description

<b>Vi50004</b>	4-Port 1G Ethernet Fiber Media Converter
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### Related Products

#### Part No. Description

<b>Vi50000A</b>	Single Port 60W 1G Media Converter
<b>Vi50001</b>	Single Port PoE Powered 1G Media Converter
<b>Vi0017</b>	40W @ 48VDC Power Supply
<b>Vi5000R</b>	Rack-Mount Kit for Vi5004 & Vi50004
<b>Vi5000B</b>	Blank Panel for Vi5000R
<b>Vi00850MMA-H</b>	850nm Multi-Mode Hardened SFP
<b>Vi01310SM-H</b>	1310nm Single-Mode Hardened SFP
<b>Vi01310MMA-H</b>	1310nm Multi-Mode Hardened SFP
<b>Vi01310sm2.5-H</b>	1310SM 2.5Gbps Single-Mode Hardened SFP

Note: The Vi01310sm2.5-H will only provide 1Gbps when used with Vi50004.

## Limited Lifetime Warranty

Vigtron, Inc. warrants that all Vigtron 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 Vigtron 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 Vigtron dealer.

Warranty will only be provided for as long as the original end user purchaser owns the product. Warranty is not transferrable. At Vigtron'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 Vigtron, 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 Vigtron, Inc. or an approved agent will void this warranty. Vigtron, 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 Vigtron, Inc. under this warranty is limited to the original purchase price of the Product only.



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