# Vi50004

### 4-Port 1G Ethernet Fiber Media Convertor

### **Features**

- Provides four 1G fiber media converter in a single chassis for easy installation
- Uses Small Format Pluggable (SFP) to interface to a variety of fiber cables
- Provides a simple method for increasing the capacity of network switches by providing additional fiber ports
- Transmits Jumbo Frames up to 9,600 bytes for handling the largest Megapixel cameras
- Distances of up to 80Km can be achieved depending on the type of fiber cable and SFPs
- Can be combined with Vi5000R for up to 16-port rack mounted configuration
- Extended temperature operation of -40°C to +75°C
- · Each port can be powered independently by PoE or local power supply



### **Applications**

- Upgrading analog fiber installations to IP without changing cables
- Solution for long distance high bandwidth requirements
- · Expanding networks in industrial environment
- · CCTV system for casinos, airports, school campuses, and many more

Vigitron'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. Each port can be individually powered by PoE or local power supply.

When Vi50004 is combined with a Vi50000A up to 60W can be provided to high power PoE cameras such as PTZ or multisenor cameras. The combination of Vi50004 and Vi50000A provides a complete reliable fiber/PoE solution.

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.





TEL (+1) 858 - 484 - 5209 • FAX (+1) 858 - 484 - 1205 7810 Trade Street, Suite 100, San Diego, CA 92121, USA • support@vigitron.com • www.vigitron.com

## **Technical Specification\***

#### **Electrical**

Ethernet	Copper Port: 10/100/1000 Base-T Fiber Port: 1000 Base-T
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	Depends on cable and SFP type
Connectors	Fiber: 4 x SFP sockets compliant to MSA standards Ethernet: 4 x RJ45 Power: 4 x Round Barrel power jack
Status LED	Power: Green LED Ethernet: Link/Traffic, 100/1000Mbps Fiber Link: Yellow LED
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 802.3u, IEEE 802.3ae, 100/1000Base-TX
Power	Each port can use PoE or 12VDC @ 0.25A

#### Regulatory

Safety	CE
Environmental	RoHS, W

RoHS, WEEE

#### Environmental

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

#### Mechanical

Dimensions 1.65 x 3.93 x 4.08 in., 4.19 x 10.0 x 10.36 cm (HxWxL) Weight 0.75lb (340g) 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 between 100Mbps and 1000Mbps. We suggest using the SFP designed for the primary ports data rate.

#### **Ordering Information**

Part No.	Description
Vi50004	4-Port 1G Ethernet Fiber Media Convertor

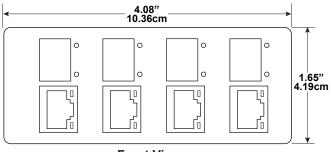
#### **Related Products**

Part No. Description		
Vi50000A	Single Port 60W 1G Media Converter	
Vi50001	Single Port PoE Powered 1G Media Converter	
Vi0017	40W @ 48VDC Power Supply	
Vi5000R	Rack-Mount Kit for Vi5004 & Vi50004	
Vi5000B	Blank Pamel for Vi5000R	
Vi00850MMA-H	850nm Multi-Mode Hardened SFP	
Vi01310SM-H	1310nm Single-Mode Hardened SFP	
Vi01310MMA-H	1310nm Multi-Mode Hardened SFP	
Vi01310sm2.5-H	1310SM 2.5Gbps Single-Mode Hardened SFP	

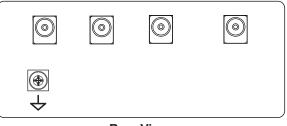
Note: The Vi01310sm2.5-H will only provide 1Gbps when used with Vi50004.



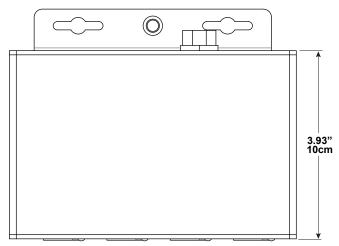
## **Mechanical Drawings**



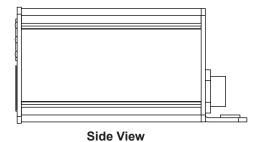
**Front View** 



**Rear View** 



**Top View** 

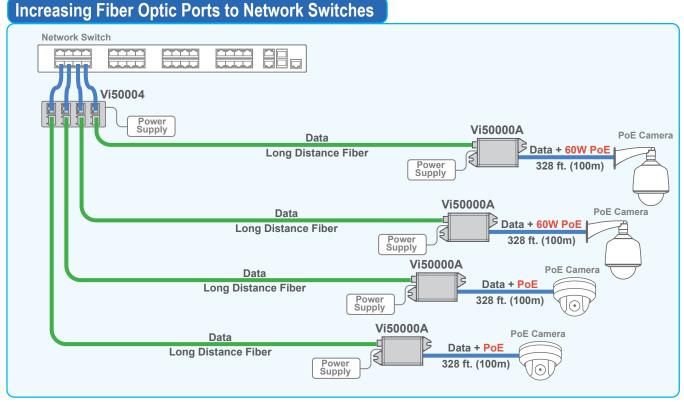




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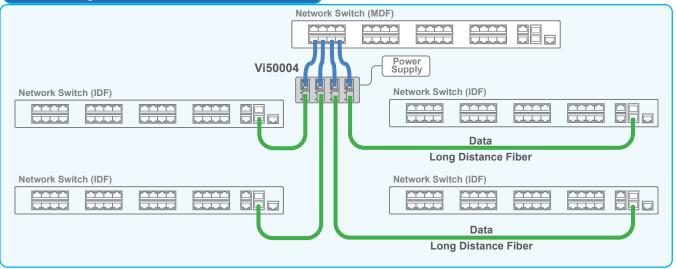
## **Application Drawings**

Cat 5/6 Fiber Optics



The Vi50004 along with Vi50000A enables addging 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.

#### Connecting IDF swithes to MDF switches



The Vi50004 can connect up to four IDF switches to an MDF switch.



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