

# Vi50000U

## Single Port 1G 60W .bt PoE Ethernet Fiber Media Converter

### Features

- Enables transmitting 1000Mbps Ethernet over fiber cables
- Provides IEEE 802.3bt up to 60W PoE to power PoE powered devices
- Uses Small Format Pluggable (SFP) to interface to a variety of fiber cables
- Depending on the type of fiber cable and SFPs distances of up to 80Km can be reached
- Transmits Jumbo Frames up to 9600 bytes for handling the largest Megapixel cameras
- Complies with all network standards
- Operates at extended temperature ranging -30°C to +65°C
- Auto bandwidth control 100/1000Mbps



### Applications

- Conversion of existing analog cameras over fiber system to IP devices
- Building-to-building communications
- Long distance connection of Megapixel cameras
- Provide safe connection for outdoor applications with high possibility of lightening
- Perimeter applications such as buildings, fences, and parking lots with the ability to use fiber as main transmission line

Vigitron's Vi50000U is a fiber media convertor that enables Ethernet signals to be transmitted over different types of fiber optic cables. UTP connections with fiber to meet long distance transmission requirement and those where fiber is already installed. The use of SFP fiber modules results in compatibility with all major single and multimode fiber optic cables to achieve desired transmission distances depending on the type of cables and SFPs. The Vi50000U can be powered from a local 12VDC or 52-57 VDC power supply.

When the Vi50000U is connected to a 52-57VDC power supply it can provides up to 60W PoE to power PTZ domes with heaters and blowers, eliminating the need for high cost local power supplies. It is compatible with devices requiring both 802.3bt sources It's auto bandwidth sensing provides an efficient way to connect cameras to network switches and NVRs.

The Vi50000U 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.

# Technical Specification\*

## Electrical

Ethernet	100/1000Mbps for RJ45 1000Mbps for SFP fiber
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 1000Mbps
Connectors	Ethernet: RJ-45 Fiber: SFP socket compliant to MSA standards Power: 2.5mm Round Barrel Connector
Status LED	Power: Green LED Ethernet: Link/Traffic, 100Mbps/1000Mbps Fiber
PoE Output Power	IEEE 802.3af, at, bt up to 60W PoE
Power Supply	12VDC @ 3W with no PoE output 52-57VDC @ up to 32W with PoE output using Vi0017 or similar power supply 52-57VDC up to 60W with PoE output using Vi1120 or similar power supply
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 IEEE 802.3bt up to 60W IEEE 802.3z
Jumbo Frame	Up to 9,600 bytes
Regulatory	CE, WEEE, RoHS

## Environmental

Humidity	0% to 95%, non-condensing
Temperature	Operating: -30°C to +65°C Storage: -40°C to +85°C

## Mechanical

Dimensions	0.97x1.75x3.93 in., 2.46x4.45x10 cm (HxWxL)
Weight	0.235 lbs (107g)
Housing Material	Extruded Aluminum

\* Specifications subject to change without notice.  
SFP port fixed at 1000Mbps

## Ordering Information

Part No.	Description
<b>Vi50000U</b>	Single Port 60W 1G Media Converter

## Related Products

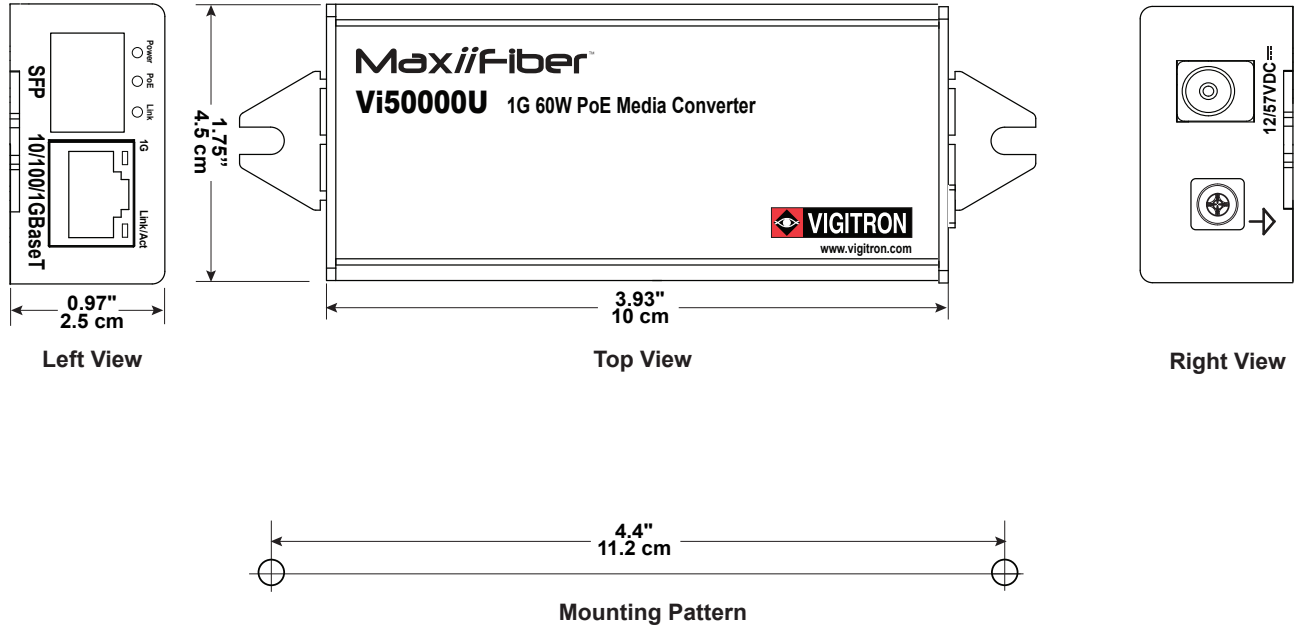
Part No.	Description
<b>Vi50001A</b>	1-Port 1G Ethernet Fiber Media Converter
<b>Vi50004A</b>	4-Port 1G Ethernet Fiber Media Converter

## 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
Ethernet Port	Green	OFF	10/100Mbps connect when linked
		ON	1000Mbps connection
Ethernet Port	Orange	OFF	No link
		ON	Link flashes with activity



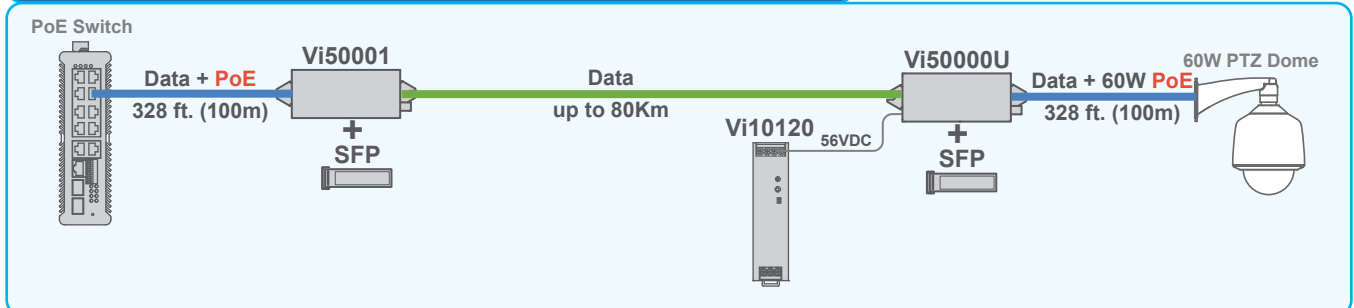
# Mechanical Drawings



# Application Drawings

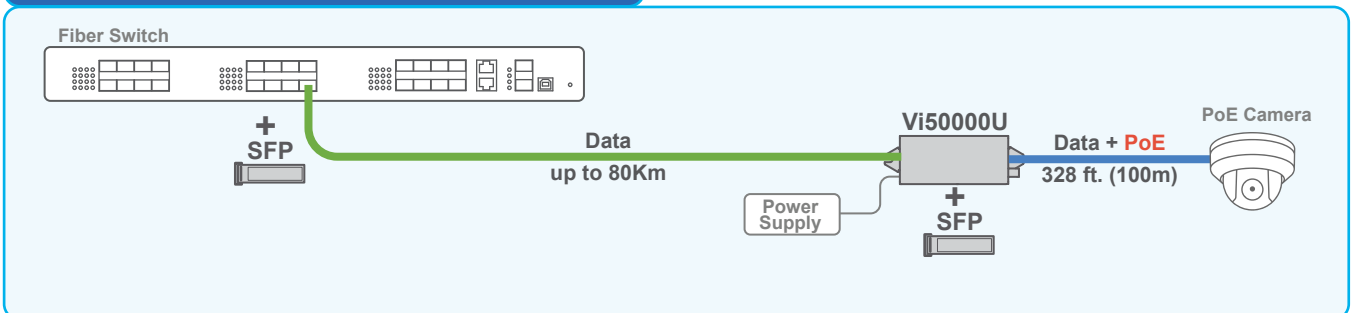
— Cat 5/6  
— Fiber Optics

## Connecting High Power PoE Cameras over Fiber cables



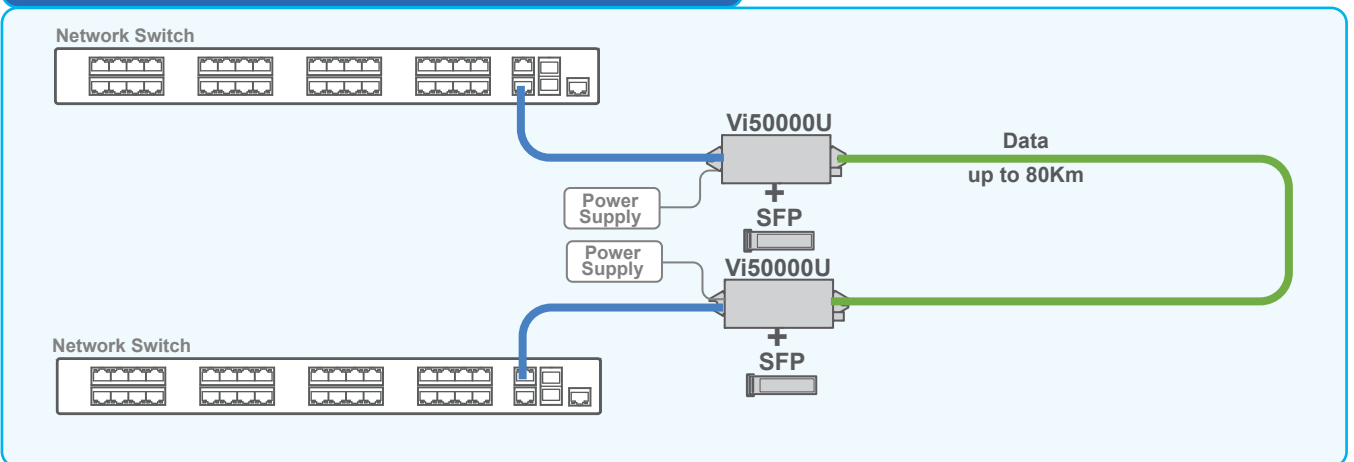
The Vi50000U is used with the Vi50001 for long distance high bandwidth applications. The Vi50000U provides up to 65W PoE power to meet the highest PTZ dome power requirements.

## Connecting IP Cameras over Fiber cables



By using the SFPs, the Vi50000U will be compatible with most installed fiber types and can be directly connected to SFP modules installed in network switches.

## Connecting Network Switches at long Distances



With 1000Mbps (1G) bandwidth, the Vi50000U is the perfect solution for connecting network switches over long distances.