

Vi50000A

Single Port 60W PoE 1G Ethernet Fiber Media Converter

Features

- Enables transmitting 1000Mbps Ethernet over fiber cables
- Provides up to 65W PoE to power PTZ domes, heaters, and blowers
- 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 -40°C to +80°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 Vi50000A 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 Vi50000A can be powered from a local 12VDC or 48VDC power supply.

When the Vi50000A is connected to a 48VDC power supply it can provides up to 65W PoE to power PTZ domes with heaters and blowers, eliminating the need for high cost local power supplies. It's auto bandwidth sensing provides an efficient way to connect cameras to network switches and NVRs.

The Vi50000A 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: Detachable Terminal block |
| Status LED | Power Ethernet: Link/Traffic, 100Mbps/1000Mbps Fiber |
| PoE Output Power | IEEE 802.3af, at, bt up to 65W PoE |
| Power Supply | 12VDC @ 3W with no PoE output 48-57VDC @ up to 32W with PoE output using Vi0017 or similar power supply 48-57VDC up to 65W 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 802.3z |
| Regulatory | CE, WEEE, RoHS |
| Jumbo Frame | Up to 9,600 bytes |

Environmental

| | |
|-------------|--|
| Humidity | 0% to 95%, non-condensing |
| Temperature | Operating: -40°C to +80°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 |
|----------|------------------------------------|
| Vi50000A | Single Port 60W 1G Media Converter |

Related Products

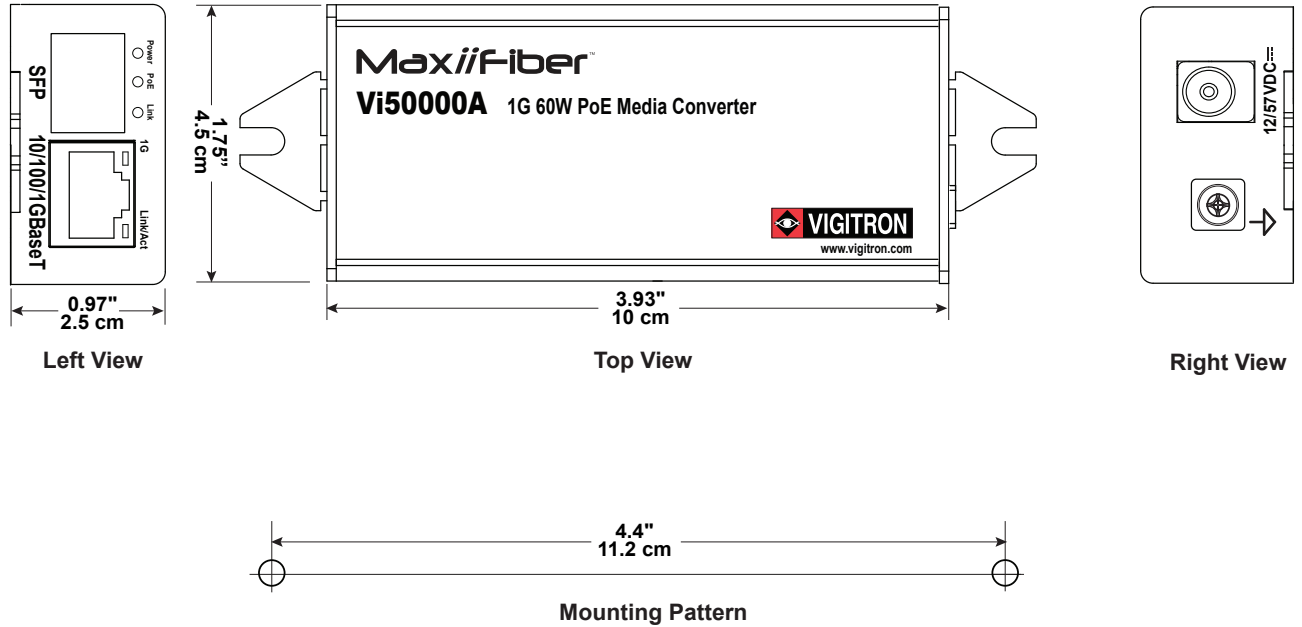
| Part No. | Description |
|--------------|--|
| Vi50001 | Single Port PoE Powered 1G Media Converter |
| Vi0012 | 12VDC @ 1 Amp for non-PoE Applications |
| Vi0017 | 40W @ 48VDC Power Supply |
| Vi00850MM-HA | 850nm Multi-Mode, Hardened, SFP |
| Vi01310SM-HA | 1310nm Single-Mode, Hardened, SFP |

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 |



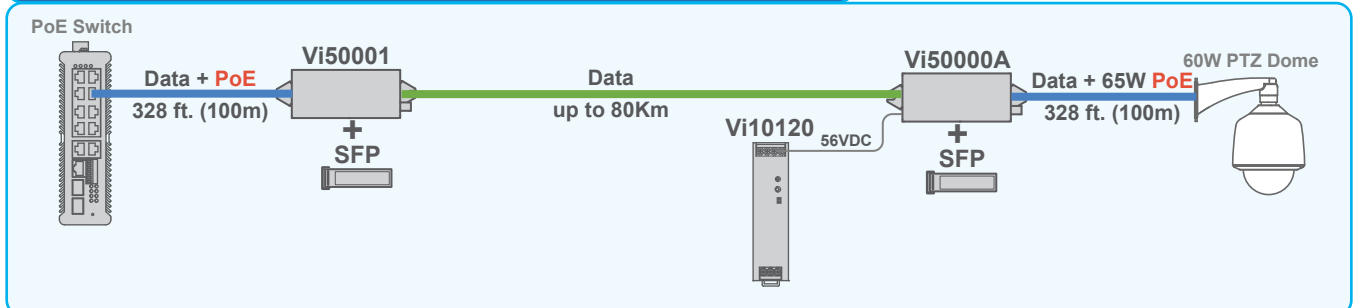
Mechanical Drawings



Application Drawings

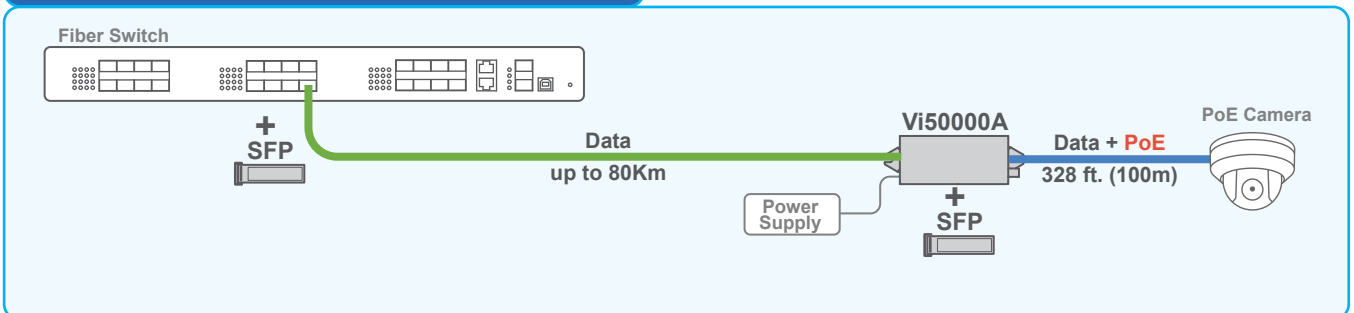
— Cat 5/6
— Fiber Optics

Connecting High Power PoE Cameras over Fiber cables



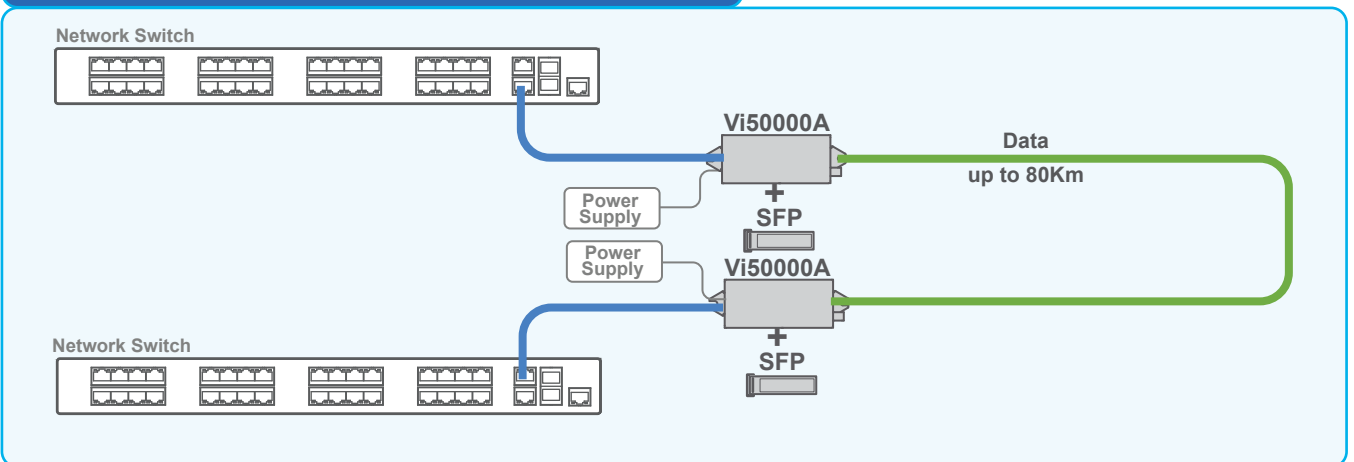
The Vi50000A is used with the Vi50001 for long distance high bandwidth applications. The Vi50000A provides up to 65W PoE power to meet the highest PTZ dome power requirements.

Connecting IP Cameras over Fiber cables



By using the SFPs, the Vi50000A 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 Vi50000A is the perfect solution for connecting network switches over long distances.