

# Vi2601 Ethernet and PoE Extender over Coax Installation Manual

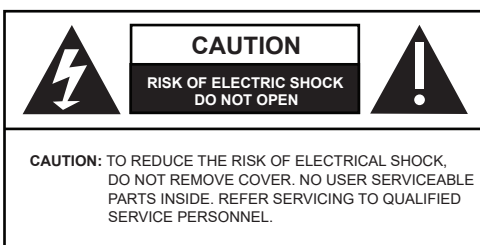
The MaxiiCopper Model Vi2601 is a revolutionary transmission device that extends full-duplex High-Speed Ethernet and High power PoE over Coax cable infrastructures. It extends 10/100BaseT signals and PoE up to 3,000 feet (914 m). It employs MaxiiCopper™ innovative and unique Ethernet and PoE extension technology that is designed to take full advantage of high-bandwidth networking cables and maintain a full-duplex 10 or 100 Mb/s Ethernet connection up to the maximum range with minimum transmission error and latency.

The Vi2601 is installed at the control room and can provide up to 30W power to Vi2400A or Vi2401A at the camera side.

The Vi2601 includes unique features that assure high performance required to support the largest Megapixel cameras. It is equipped with LEDs to provide link status and configured data rate. No IP setting or configurations are required and it is completely transparent to the corporate IP network and higher layer protocols. The Coax cable needs to be point to point without any branches. Multiple segments can be joined together using Coax couplers.

## 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 temperature exceeds 50°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 mains 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.

## IP Camera-end Installation

- Install a remote extender, Vi2401A or Vi2400A, at the camera side. The remote extender can be powered in 2 ways.

### 1- Using Local Power Supply:

Connect a 12 VDC power supply to the power connector of the Vi2401A or Vi2400A. A power adapter connector is provided to simplify connection to Vi2401A.

### 2- Using PoE:

If no local power supply is plugged in, the remote unit will use PoE power provided by the Vi2601 at the head-end.

- Connect the IP camera RJ45 connector to the "10/100BaseT Ethernet" port of Vi2401A or Vi2400A using a standard Cat5/6 cable of maximum length of 328 feet (100m).

- Connect the long Coax cable to the "Extended Ethernet" BNC connector of Vi2401A or Vi2400A.

The link LED on the 10/100 connector should be "ON" to indicate proper connection between the camera and Vi2401A or Vi2400A.

## Ethernet Switch/NVR-end Installation

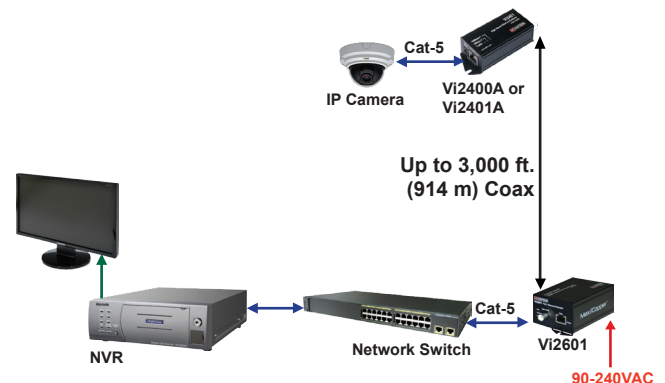
- Connect the RJ45 connector of the Ethernet switch to the 10/100BaseT Ethernet port of Vi2601 using a standard Cat5/6 cable of maximum 328 feet (100 m) in length.

- Connect the long Coax cable to the "Extended Ethernet" BNC connector of Vi2601.

- Connect the AC power cord of the Vi2601 to the mains.

The link LED on the 10/100 Ethernet connector should be "ON" to indicate proper connection between the switch and Vi2601.

When Vi2601 and the remote unit make a connection, the Vi2601 will provide power to the remote unit and the camera. When the Link LED is on and is in a steady state it will indicate confirmed connection between extenders.



## Technical Specifications\*

### Electrical

Ethernet Interface	Standard 10/100BaseT
Coax	RG59 (or higher quality)
Ethernet Rate	10/100Mbps, Auto-select Full speed / Full duplex at max. rated distance
Power Output	56VDC, 30W
AC Input Power	100-240VAC, 50-60Hz, 0.5A max.
PoE Standard	IEEE 802.3af PoE, IEEE 802.3at PoE
Status LEDs	PoE: Green
Data Interfaces and 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
Connectors	Ethernet Input Interface: Shielded RJ45 Extended Output Interface: Female BNC Main Power: IEC 320-C14 Inlet
Jumbo Frame	Yes
Packet Handling	9600 Bytes

### Regulatory

Safety	CE
Environmental	RoHS

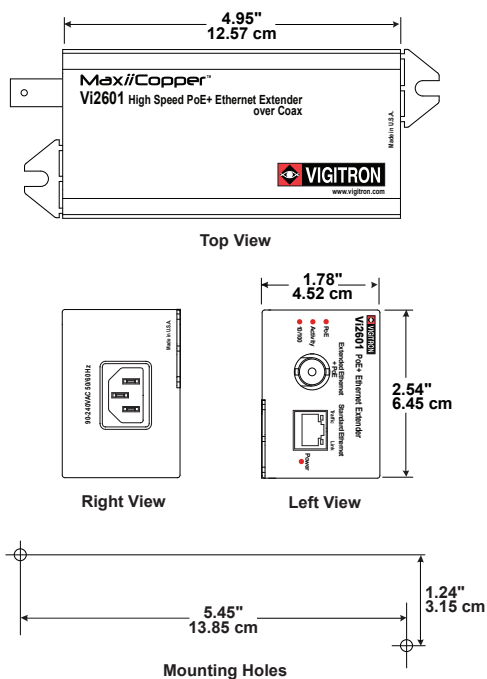
### Mechanical

Dimensions	1.78x2.54x4.95 in., 4.52x6.45x12.57 cm (HxWxL)
Weight	0.71 lb, 321 g
Material	Extruded Aluminum

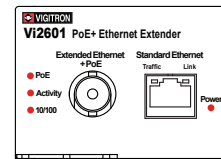
### Environmental

Humidity	0 to 90%, Non-condensing
Temperature	Operating: -10°C to +50°C Storage: -40°C to +80°C

## Drawings



## Status LEDs



LED Name	Color	Status	Function
Power	RED	OFF	Power is OFF
		ON	Power is ON
Traffic (Extended Side)	YELLOW	OFF	No Traffic
		FLASHING	Traffic
10/100 BaseT (Extended Side)	GREEN	ON	Connection is OK, 10BaseT Mode
	ORANGE	ON	Connection is OK, 100BaseT Mode
Traffic (Standard Side)	GREEN	OFF	No connection
		FLASHING	Connection is OK with Traffic
Link (Standard Side)	YELLOW	OFF	No connection
		ON	Connection is OK
PoE	GREEN	OFF	PoE Power is Off
		ON	PoE Power is On

## Data and PoE Distance\*\*

Data Rate	Data+ 802.3at PoE Class 2 (6.5W)	Data + 802.3at PoE Class 3 (12.95W)	Data + 802.3at PoE Class 4 (25.5W)
10BaseT	3,000 ft./914 m	1,500 ft./457 m	500 ft./152 m
100BaseT	3,000 ft./914 m	1,500 ft./457 m	500 ft./152 m

\*Specifications subject to change without notice.

\*\*Distance figures are based on RG59 coax cables using in house testing mirroring typical installations. Factors such as cabling, connections, use of power and environmental conditions may affect actual distances and should be taken into consideration.

## Ordering Information

PART No.	Description
V12601	Extended Coax PoE Midspan
V12400A	Coax Ethernet Extender
V12401A	Coax Ethernet Extender

## Limited Lifetime Warranty

Vigiton, Inc. warrants that all Vigiton 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 Vigiton 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 Vigiton dealer.

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



TEL (+1) 858-484-5209 • FAX (+1) 858-484-1205

7810 Trade Street, Suite 100, San Diego, CA 92121, USA • support@vigiton.com • www.vigiton.com

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