Vi2804 / Vi2804P

MaxiiCollector ™ 4-port High-Speed Switch w/ Extended UTP and Coax Ethernet

Features

- Four port Fixed Managed network switch with Extended Ethernet outputs over UTP and Coax providing a single extended cable output for up to 4 cameras.
- Extends Ethernet beyond 328 (100m) limitation up to 3,000 feet (914m) over UTP cables or up to 5,000 feet (1,515m) over coax cables.
- Vi2804P supplies full 802.3/af/at to each port withouth power sharing using an external power supply.
- Can be powered using 12Volts DC, 24 Volts AC or PoE af/at (Vi2804 only).
- MegaPixel Certified (MPC™) high data rate, for virtual loss free transmission of cameras requiring Jumbo Frame transmission.
- Symmetric Bandwidth (SBW™) provides consistent upload and download with Virtual Zero Packet Loss (VZPL™) over total specified distance.
- Type tested to RFC 2544 TCP/IP network bandwidth packet transmission standards and Jumbo Frame Transmission.
- Supports one pair or four-pair UTP wires with built-in cable connectivity tester.
- Type tested for -10 C° to +75C° operating temperature range conforming to NEMA-TS2 testing standards.
- Complies with major IEEE standards and RFC network protocols for UCP, TCP/IP, HTTP/HTTPS.
- USA Designed and Manufactured.
- Limited lifetime warranty

Applications

- Upgrading analog CCTV installations into Digital systems
- Expanding Networks in industrial environment
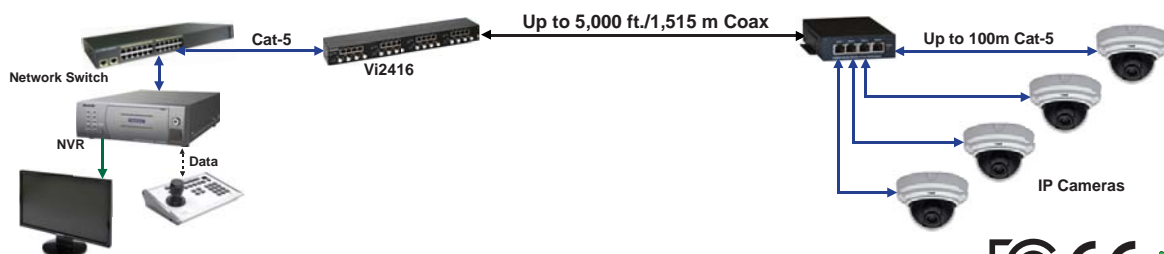- CCTV System for Casinos, Airports, School Campuses, and many more.

Vigitron's MaxiiCollector™ Vi2804 Fixed Managed four port network switch and network data extender brings new performance standards to the growing need for high speed transmission of high speed Ethernet over extended distances. Its unique Symmetric Bandwidth(SBW™) assures full bandwidth transmission is maintained over the entire operational distance for both uploads and downloads with Virtual Zero Packet Loss (VZPL™). Bandwidth assurance provides the ability to transmit multiple cameras on single camera runs with no information loss. Combined with the Vi2300 or Vi2400 series multi-port extenders, up to 64 cameras can be transmitted to a central location on just 16 cables.

The Vi2804 can be powered using standard camera 12 VDC, 24 VAC power supplies, or PoE eliminating the costs and complications of remote site power supplies. The Vi2804P provides 802.3af/at POE up to 30W to up to 4 cameras while maintaining all safety features to protect your network powered devices.

Type tested under NEMA-TS2 environmental standards for extended temperature operation from -10C° to +75C°, the Vi2804 is the perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos, and many more. Best of all, the Vi2804 is MegaPixel Certified (MPC™), type tested to network packet performance standards, and major manufacturer compatibility tested to assure you error free, quality operations. Fixed managed L2 functions include 802.1p Qos, support of 2k MAC addressing, learning, aging, and a non-blocking switch fabric

Installation cost savings, proven performance, and major camera manufacturer compatibility all go into making Vigitron's MaxiiCopper™ Vi2804 your best choice for extended distance data and power transmission.

Application Diagram

Technical Specification [1]

Electrical

Ethernet Interface	Standard 10/100BaseT
Ethernet Rate	Dip switch selectable 10/100 Mb/s Full speed / full duplex at maximum rated distance
Coax [2]	75 Ohm, 5000 feet (1,515m) at 10BaseT 1800 feet (548 m) at 100BaseT
UTP [2]	100 Ohm +/- 20%, 3,000 feet (914 m) at 10BaseT 2,100 feet (640 m) at 100BaseT
Power Supply	Vi2804: 12 VDC, 24 VAC or POE @ 250 mA max. Vi2804P: 48VDC @ 1.5A min. for 802.3 af 15.4W / port 56VDC @ 2A min. for 802.3 at 25.5W / port
Status LEDs	Power Standard Ethernet: Traffic, Link Extended Ethernet: Traffic, 10/100BaseT
Connectors	Ethernet Interface: 4 x RJ-45 Connector Extended Interface: Female BNC, RJ-45 Connector Power: Pluggable Terminal Block
RFC	2544 TCP/IP Packet Transmission
Compatible with	IEEE 802.3af PoE, IEEE 802.3at PoE
RFC	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility	802.3af Class 0,1,2,3
	802.3at Class 4
Jumbo Frame Support	Yes

Regulatory

FCC	Part 15, Subpart B, Class B 2010
Emissions	EN 5502:2006+A1:2007 EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008 EN 55024:1998+A1:2001+A2:2003
Rohs	
CE	

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -10°C to +75°C Storage: -40°C to +75°C

Mechanical

Dimensions	1.2x3.75x4.97 in., 3.0x9.53x12.6 cm (HxWxL)
Weight	0.64 lb (290 g)
Material	Aluminum

Accessories

12 VDC wall-mount power supply (optional)
Mounting brackets

Ordering Information

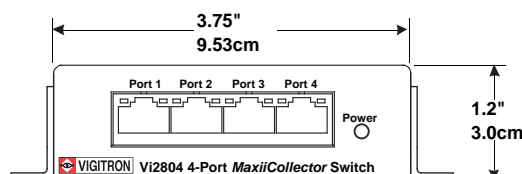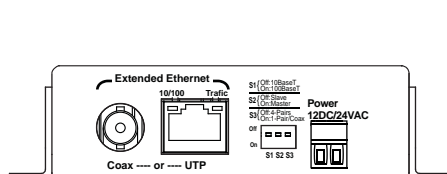| Part No.	Description
Vi2804	4-port Extended Distance Eth. Switch
Vi2804P	4-port PoE Extended Distance Eth. Switch
Vi0012	12VDC, 1A Wall-mount Power Supply

System Configuration

Vi2401   Or   Vi2301

5,000 ft. 1,515 m   3,000 ft. 914 m

Vi2804

Data and PoE Distance [2]

Extended Ethernet over UTP (Cat-5)

Data Rate	4-Pair [4] (data + poe class 2)	1-Pair (data only)
10BaseT	3,000 ft. (909 m)	3,000 ft. (909 m)
100BaseT	2,100 ft. (636 m)	1,000 ft. (303 m)

Extended Ethernet over Coax (RG59U)

Data Rate	Distance [3] (without POE)	Distance [4] (with POE)
10BaseT	5,000 ft. (1,515m)	3,000 ft. (909m)
100BaseT	1,800 ft. (546m)	1,800 ft. (546m)

1. Specifications subject to change without notice.
2. Distance figures are obtained using in house testing mirroring installations. Factors such as cabling, connections, use of power and environmental conditions may affect actual distances and should be taken into consideration.
3. Distance figures are based on RG59U Coax or Cat-5 cable and external power supply for extender and camera.
4. Distance reflects Vi2804 powered by PTP™ from a single source using either Vi2301 or Vi2401 as transceiver.

Extended Ethernet

10/100   Trafic

S1 Off:10BaseT / On:100BaseT
S2 Off:Slave / On:Master
S3 Off:4-Pairs / On:1-Pair/Coax

Off
On
S1 S2 S3

Power
12DC/24VAC

Coax ---- or ---- UTP

3.75"
9.53cm

Port 1   Port 2   Port 3   Port 4   Power

VIGITRON Vi2804 4-Port *MaxiiCollector* Switch

1.2"
3.0cm