

# Vi31026

## 26-Port, 8-Port Extended UTP, 16-Port Standard, L2, Hybrid PoE Switch

### Features

- Provides 24 ports with high power PoE up to 36W or 72W on each port
- Transmits data/video and PoE up to distances of 3,000 ft. (909m)
- 8 extended UTP ports, 16 ports standard UTP and 2 uplink ports
- 24 ports at 10/100Mbps, 2 shared fiber/copper Uplink ports @ 1000Mbps
- Two 1000Mbps independent Uplink ports allow for full use of all 24 ports
- SNMP for communicating error messaging to local computers
- Automatic IP and PoE connection and reconnection
- Automatic programmable MAC identification for all connected devices
- Individual port MAC detection and binding for port security
- 685W total power supply, 550W PoE budget
- Programmable Web Access Filtering (WAF) to prevent unauthorized access
- Transient Protect™ intelligent PoE sensing to prevent damage from short
- Individual port and main power supply over current, over voltage, over temperature and over current protection with automatic recovery
- Provides 9G bytes fabric switching rate for handling largest megapixels IP cameras
- SecurPort™ provides individual port and complete switch protection against hacking and ghosting



### Applications

- Upgrading existing analog CCTV installations to digital
- Core network switch for any networking application
- CCTV system for casinos, airports, school campuses, and many more

Vigitrone's Vi31026 is the next generation L2 managed switch designed for PoE+ and high bandwidth network applications, providing a reliable infrastructure for your business network. Eight extended UTP ports provide solutions that require both extended distance and standard distance applications in one convenient cost effective space saving package. The Vi31026 provides solutions for applications up to distances of 3,000 feet (909m) with centralized maximum bandwidth utilization increasing system performance and reliability. The Vi31026 delivers intelligent features needed to provide unmatched reliability to the critical business applications with unique PoE monitoring and application features. The Vi31026 enables individual port programming to apply PoE individually to each port in order to lower the potential for power overload resulting in potential damage to the switch and connected devices.

- High Power PoE Budget: Total 685W power supply with 550W PoE budget providing 24-ports at IEEE 802.3at, 8-ports at up to 72W UPoE.
- Individual PoE port power up to 72W for powering PTZ domes with heaters and blowers and required power to handle surges from auxiliary functions such as day/night, avoiding port PoE shut down
- Transient Protect™ determines the difference between the need from additional PoE power and potential damaging short circuits providing extra power when required or shutting down port PoE to protect connected devices
- The 9Gbps switch fabric assures all required bandwidth, even with all ports at their maximum bandwidth to keep video and data quality
- Automatic connection, re-connection, and port monitoring with PoE for more reliable start-ups and reducing down time potentials
- Programmable multicasting for compatibility and performance with largest IP video network systems
- Programmable Rapid Spanning Tree for redundant network configuration assuring maintenance of network communication using multiple paths
- Automatic MAC address detection for connected devices for easy connection verification and security programming
- Programmable and auto detect MAC address binding limiting access for potential hacking
- Layer 2 network switch compliance
- Web filtering and MAC address binding provide a two stage protection against hacking
- SecurPort™ provides complete protection against ghosting when attempts are made to connect unauthorized devices by copying device MAC and IP addresses

# Technical Specification

## Electrical

Ethernet Interface	24 Ports RJ45 @ 10/100Mbps 8 Extended UTP Ports 16 Standard UTP Ports 2 Combination Ports RJ45 @ 1000Mbps 2 Combination Ports MSA Compliant Fiber @ 1000Mbps
Throughput	63.75Mbps
Power	100-240VAC 50/60Hz, internal, universal
Status LEDs	Power, Traffic, Link, and PoE
Total Power Supply	685W
Total PoE Budget	550W
PoE per Port	36W, 72W UPoE
Switch Fabric	9.5MPPS, 9Gbps
Connectors	10/100Mbps Ports: 24 x RJ45 Connectors 1000Mbps Uplink Ports: 2 x RJ45 Connectors 1000Mbps Uplink Ports: 2 x SFP Console Port: USB
PoE Compatibility	IEEE 802.3af/at Supports per port PoE configuration function
Packet Size	1536 Bytes @ 10/100/1000Mbps
MAC Table	Up to 4K MAC addresses
Port Security	MAC Address Based IP Address Based TCP/UDP Port Based

## Regulatory

FCC	Part 15, Class A
Safety	CE, UL, cUL
Environmental	RoHS, WEEE

## Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: 32° to 104° F; 0° to 40° C Storage: -4° to 158° F; -20° to 70° C

## Mechanical

Dimensions	1.75 x 17.5 x 14.87 in, 44.5 x 445 x 378 mm (HxWxL)
Weight	12.7 lb (5.76 Kg)
Housing	Extruded Aluminum & Steel sheetmetal

## Accessories

- Power Cord
- Mounting Kit
- USB Drive: Operations Manual, Datasheet

## Minimum Requirements

- Web Browser: Mozilla Firefox v2.5 or later, Microsoft Internet Explorer v6 or later
- Category 5 Ethernet network cable
- TCP/IP, network adapter, and network operating system (such as Microsoft Windows or Linux) installed on each computer in the network

\*Specifications subject to change without notice.

## Ordering Information

Part No.	Description
<b>Vi31026</b>	26-Port, 8-Port Extended UTP, 16-Port Standard, L2, Hybrid PoE Switch

## Vi31026 Compatible ANSI/IEEE Standards

IEEE/ANSI Standard	Description
IEEE 802.3	Ethernet 10baseT UTP
IEEE 802.3u	Fast Ethernet 1000baseTX UTP
IEEE 802.3ab	Ethernet 1000baseTX UTP
IEEE 802.3z	Ethernet 1000baseX
IEEE 802.3x	Flow control Capability
IEEE 802.1q	VLAN
IEEE 802.1p	Class of Service
IEEE 802.1x	Access Control
IEEE 802.1d	Spanning Tree
IEEE 802.1w	Rapid Spanning Tree
IEEE 802.1s	Multiple Spanning Tree
IEEE 802.1AB	Link Layer Discovery Protocol (LLDP)
IEEE 802.3az	Energy Efficient Ethernet Task
IEEE 802.1Q	Tag Based VLAN
ANSI/IEEE 802.3	Auto – negotiation

## Related Products

Part No.	Description
<b>Vi2300A</b>	Single port Mini UTP Ethernet Extender
<b>Vi2301A</b>	Single port UTP Ethernet Extender
<b>Vi2301AU</b>	Single port UTP Ethernet Extender
<b>Vi2300WP</b>	Single port IP67 UTP Ethernet Extender
<b>Vi2304A</b>	4-port UTP Ethernet Extender
<b>Vi2308A</b>	8-port UTP Ethernet Extender
<b>Vi2316A</b>	16-port UTP Ethernet Extender
<b>Vi2701TX</b>	Single port Extended UTP Extender
<b>Vi31126</b>	26-port L2, Hybrid PoE Switch



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# Technical Specifications

## Layer 2

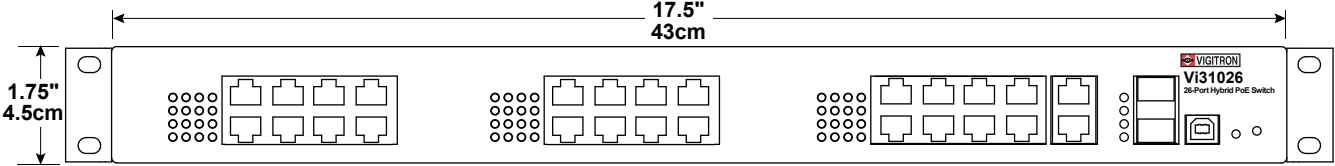
Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Supports up to 5 different protocol states
VLAN	Supports <ul style="list-style-type: none"><li>• Port-based VLAN</li><li>• 802.1Q tag-based VLAN</li><li>• VID Based VLAN</li></ul>
Class of Services	Port Based 802.1Q priority tag based IP TOS/DSCP based for IPv4/IPv6 TCP/UDP port based 2 level priority per port WRRR/First Come-First Serve/Strict Priority
Broadcast Storm Control	Broadcast rate control per port Block broadcast packet not belonging to ARP or IP Packet forwarded to CPU port
Bandwidth Control	480 configurable levels from 32Kbps to 63.75Mbps @ 10/100Mbps 508 configurable levels from 32Kbps to 510Mbps @ 1000Mbps
Spanning Tree Protocol	Blocking/listening/learning/forwarding/disabling/forwarding BPDUs to CPU port
Capture and Port Forwarding	BPDUs, LACP, 802.1x, GMRP, GVRP, ARP, ICMP, IGMP, OSPF, Specific TCP/UDP port numbers
Specific Packet Capture with Forwarding to CPU Port	BPDUs, LACP, 802.1x, GMRP, GVRP, ARP, ICMP, IGMP, TCP, UDP, OSPF Packets with specific TCP/UDP port
MAC Table	Binding User programmable Programmable aging 55 seconds to 15.7 hours

## Security

Port Security	MAC address based IP address based TCP/UDP port based Port Based SecurPort™ ghosting protection
MAC Based Port Security	Learning Programmable
Log on	Programmable username and password
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
ACLs	Drop or rate limitation based on source and destination MAC, VLAN ID or IP address, protocol, port, differentiated services code point (DSCP) / IP precedence, TCP/UDP source and destination ports, 802.1p priority, Ethernet type, Internet control message protocol (ICMP) packets, IGMP packets, TCP flag. Supports up to 256 entries.



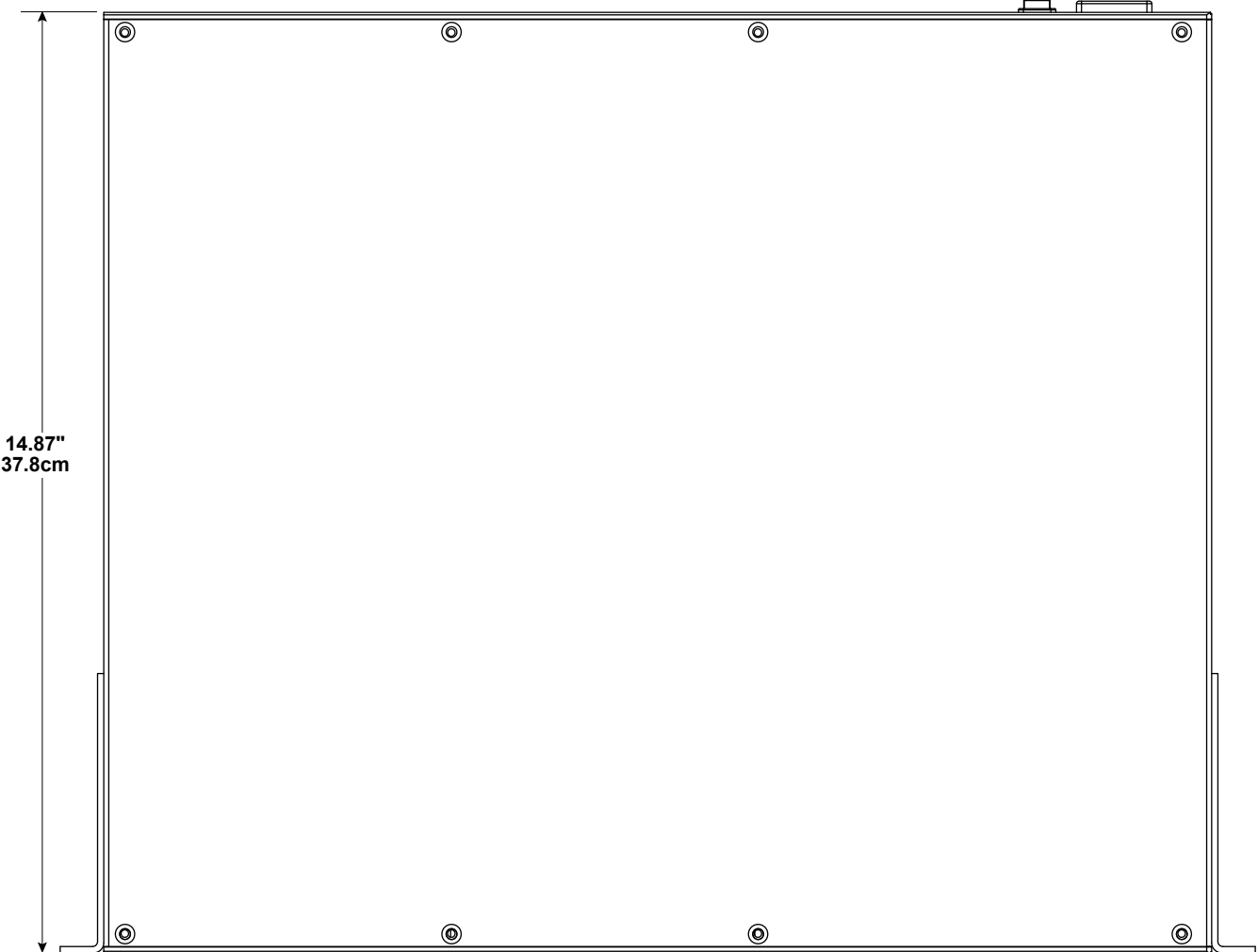
# Mechanical Drawings



Front View



Rear View



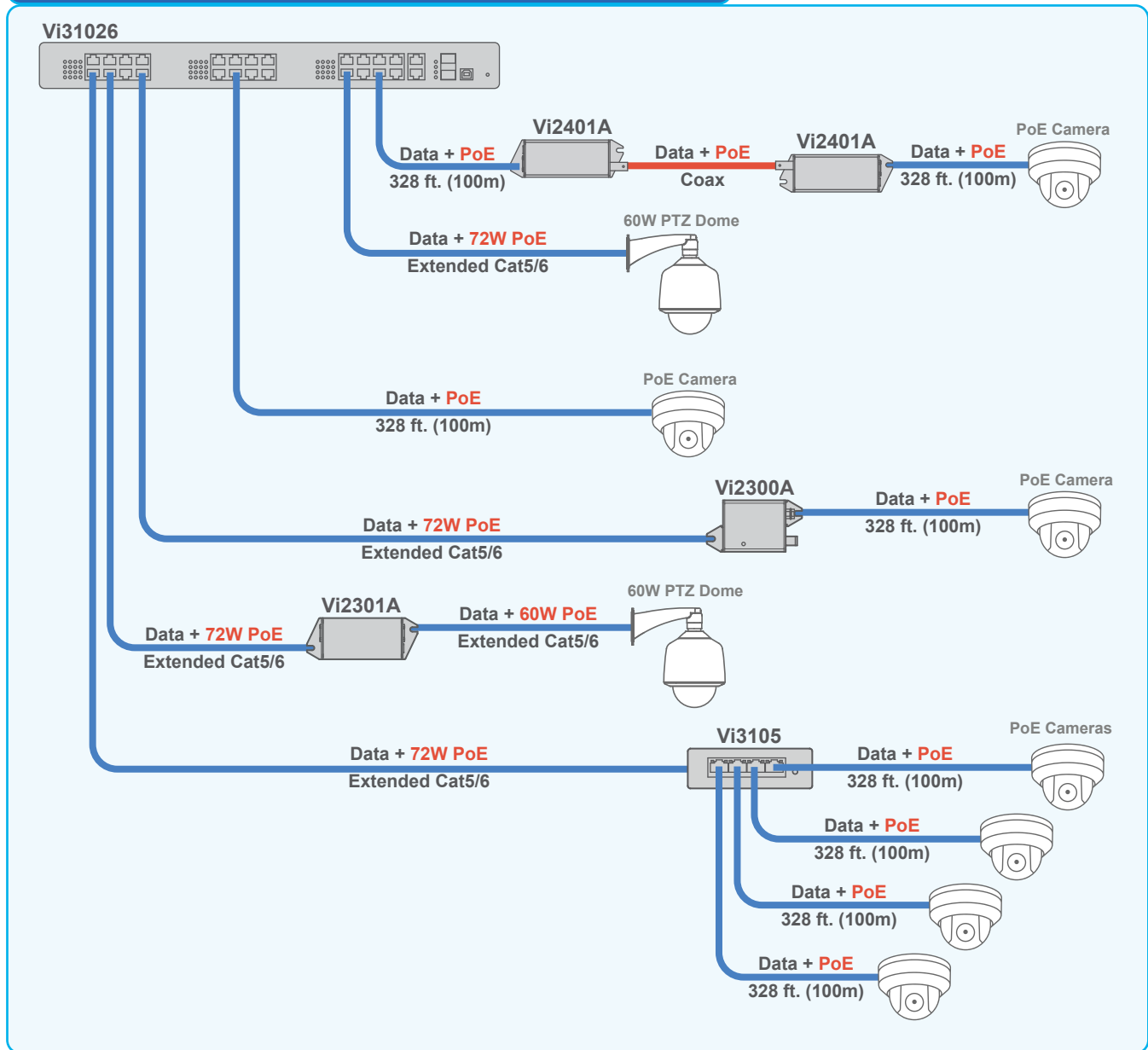
Top View



# Application Drawings



## Data and transmission over standard and extended UTP



The Vi32026 can transmit data and PoE up to 72W over standard and extended UTP cables.