

# Vi30310U

## 12-Port 802.3bt 90W L3 Lite Managed PoE Switch

### Features

- 8 + 2 ports with 10/100/1000/2500Mbps data rate†
- Layer 2+ /Layer 3 Lite Static routing with 2 fiber and 2 copper independent Uplink ports
- 9.6K byte programmable packet at 100/1000/2500Mbps port bandwidth
- Jumbo frame programming at all bandwidth settings
- 8-ports of 90W IEEE 802.3bt PoE compliant ports w/ 730W PoE budget
- G.8032 V1/V2 Rapid Ring protocol compliant
- Dual fiber/copper Uplink ports
- Built in 6kV surge protection on each port
- 30Gbyte Switch Fabric for highest MP camera handling
- Unique TimeZone feature for date and time sync without the need of an external device or network link
- NTP and Real Time Clock (RTC)
- Dual programmable Form C alarm outputs
- Programmable Port Temperature monitoring
- Tested for critical transportation and traffic applications
- Detailed Syslog with Health status messaging
- Dual power input for backup power supply



### Applications

- Transit vehicles and stations
- On board vehicles
- Highways, Parking lots, Garages
- Perimeter security



### Description

Vigitrone's Vi30310U is an enterprise level network PoE switch that provides eight 10/100/1000Mbps PoE copper ports, two independent copper and two independent 1G/2.5G fiber uplink ports. Focusing on network and port security, it is a Layer 2+ PoE Switch that focuses on network and port security. It provides all of the features required for network operation including each port be programmable with an individual MAC address.

It allows for secured Layer 3 signal routing without any exposure to outside unsecured access. Jumbo frames can be programmed at 100Mbps for direct connection to the cameras and most IP security devices, reducing the potential for data loss while providing the ability to handle the largest megapixel cameras. Each port can be configured for individual and different subnet VLANs. The system syslog provides detailed performance. The Vi30310U is the perfect network switch solution for small systems or for IDF to MDF configurations.

The Vi30310U is designed to meet the growing bandwidth requirements for IP security cameras by providing both reliability and conductivity with the ability to locate and determine network system problems:

- Layer 3 lite operations for operations across different subnets while maintaining network security
- Programmable video/data packet transmission up to the Jumbo Frame limit of 9.6K bytes for transmitting the highest megapixel cameras at 100Mbps, 1G port speeds for UTP ports and 1G/2.5G for fiber ports
- The 30 Gbps switch fabric assures video and data transmission quality even when all ports are at their maximum bandwidth.
- Programmable G.8032 standard ring protocol
- 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
- Ability to use ICMP, TCP, and UDP packet transmission to test network connectivity through multiple hops
- Automatic MAC address detection for connected devices for easy connection verification and security hops
- Unique TimeZone feature for date and time sync without the need of an external device or network link
- 2 independent copper and 2 Independent Fiber ports providing a total of 4 uplinks

†2.5Gbps limited to Fiber ports only



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# Technical Specification\*

## Electrical

Ethernet Interface	Standard: 10/100/1000BaseT
Uplink	100/1000/2500**BaseT- SFP
Data Ports	8 Copper ports with PoE, 2 Copper/MSA Fiber ports
Uplink Ports	2 X 100/1000/2500 fiber ports 2 X 100/1000 UTP ports
Fiber Packet Size	9600@ 100Mbps/1000Mbps/2500Mbps
Bandwidth Sensing	MDI/MDIX
Switch Fabric	30GB
Ethernet Ring	G.8032 V1/V2 standard, Recovery Time <50ms
Power Source	120/240VAC @ 50/60Hz
PoE Compatibility	IEEE 802.3af/at/bt, Classes 0-8 up to 90W
PoE Budget	730W
Power Consumption	20W, no load
Status LEDs	Power : Red LED System : Red LED Link/Activity: Green LED Data rate : Orange LED (ON for 1G) PoE : Green Active Fiber Link : Green LED Alarm: Red Flashing
Connectors	Standard Ethernet : 10 x RJ-45 Connectors Console : 1 x RJ45 Fiber Optics : 2 x MSA compliant SFP Connector Alarm Output : 6-pin Terminal block Power: AC IEC-320-C14
RFC	2544 TCP/IP Packet Transmission 768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
Surge Protection	6KV

## Regulatory

FCC Emmissions	Part 15, Subpart B, Class B 2010 EN 5502:2006+A1:2007 EN 61000-3 EN55032 EN55035 2:2006+A1:2009+A2:2009
Safety	CE, EN 62368 (Replacing EN60950-1)
Environmental	RoHS WEEE, Article 11 – Annex V Directive 2012/19/EU

## Environmental

Temperature	Operating: 0°C to +40°C Storage: -20°C to +70°C
Humidity	0 to 95%, non-condensing

## Mechanical

Dimensions	1.75x8.7x17.3 in., 4.4x22x44 cm (HxWxL)
Weight	5.3 lb, 4.4 Kg
Mounting	Desktop
Material	Sheet Metal

## Accessories

Mounting Kit  
AC power cord  
USB Memory Stick: Operations Manual, Datasheet

\* Specifications subject to change without notice.

\*\* Uplink Fiber ports only

## Ordering Information

Part No.	Description
<b>Vi30310U</b>	Managed 10-Port, L2+, 1G Industrial 90W PoE Ring Switch

## Related Products

Part No.	Description
<b>Vi30210U</b>	Hardened 10 Port, Managed 90W PoE Industrial Ring Switch
<b>Vi30208U</b>	Hardened 4+2+2 Port, Managed 90W PoE Industrial Ring Switch

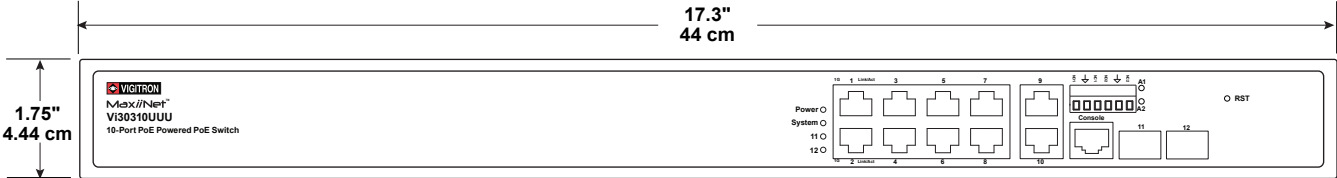


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# Mechanical Drawings



Front View

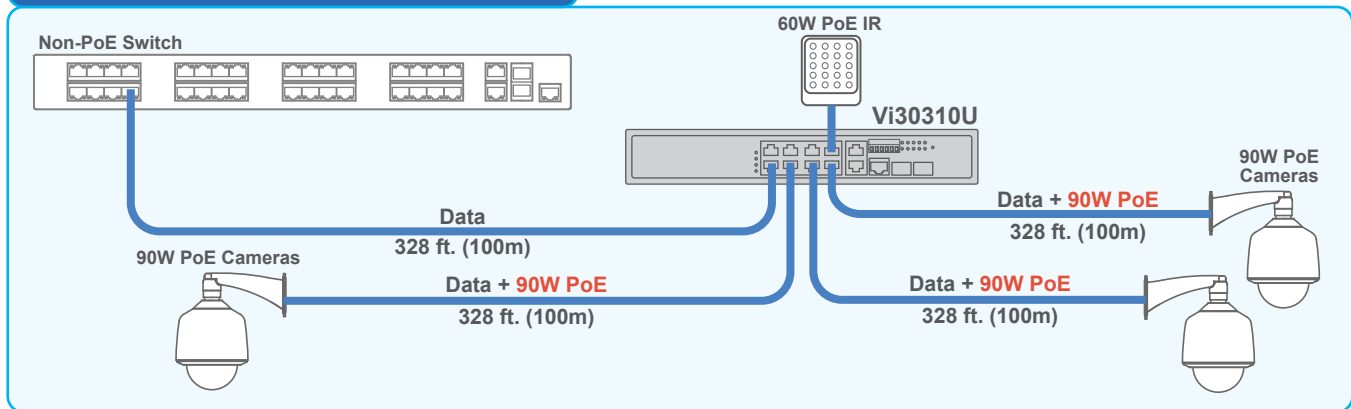


Rear View

# Application Diagrams

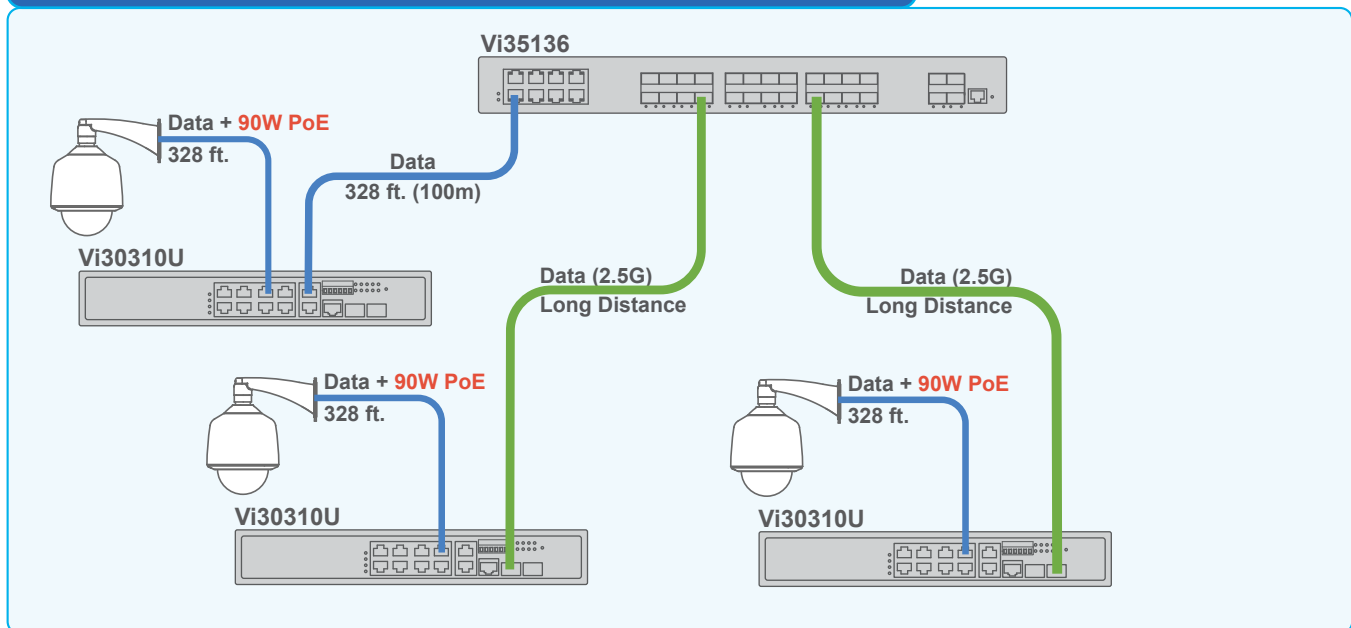
— Cat 5/6  
— Fiber Optics

## Powering High Power PoE Cameras



The Vi30310U and Vigitron Hardened power supplies can power multiple high power PoE PTZ Cameras up to 90W.

## Powering High Power PoE Cameras in a high speed network



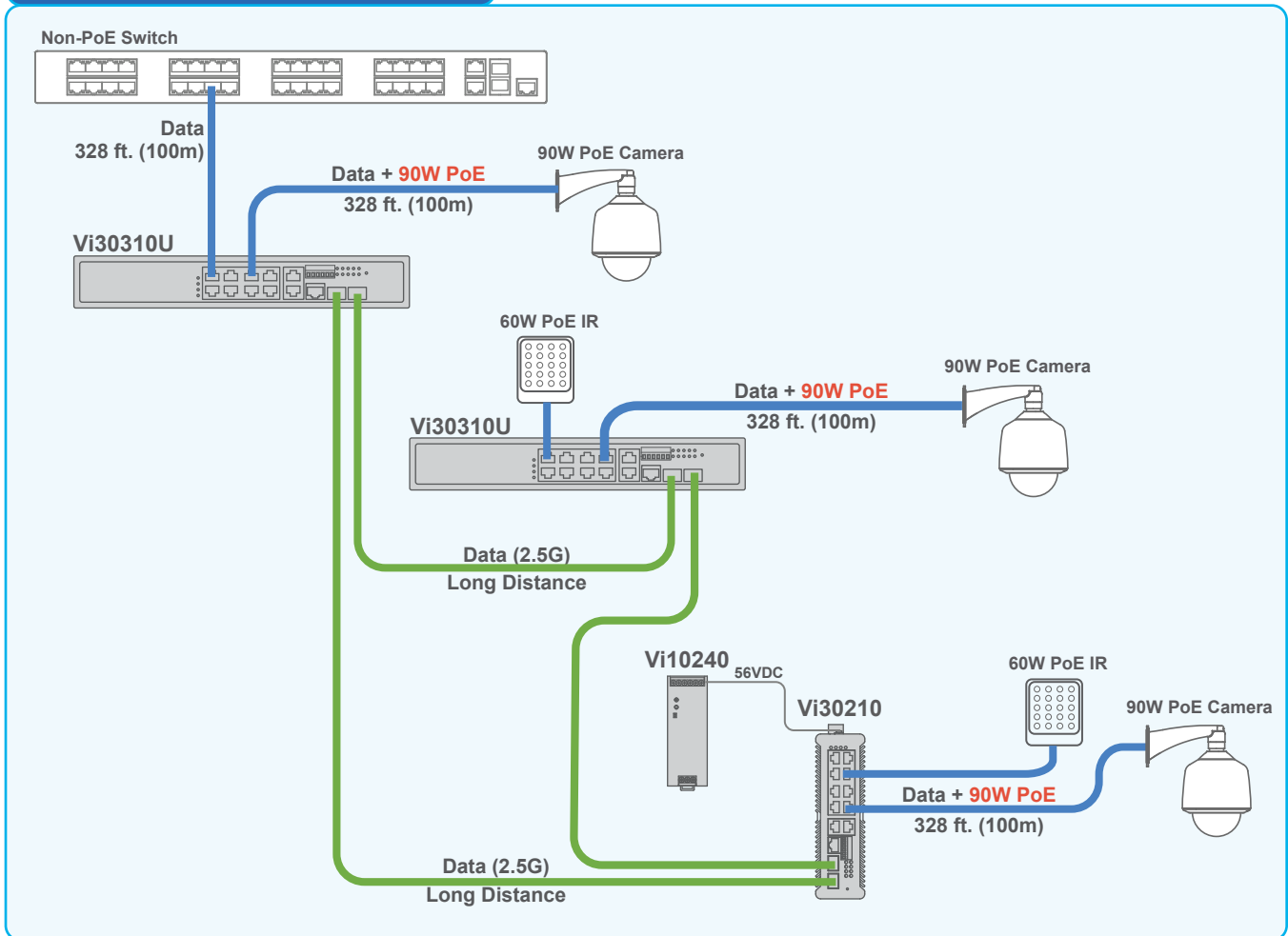
Multiple Vi30310Us can power high power PoE PTZ Cameras up to 90W through a high speed copper and fiber network.



# Application Diagrams

— Cat 5/6  
— Fiber Optics

## The Ring Network Configuration



Multiple Vi30310Us can be used in a Ring Network configuration to increase the reliability of the network.