Vi30210U

Hardened Managed 12-Port, L3 Lite, 1G Industrial 802.3bt 90W PoE Ring Switch

Features

- 8 x 1G PoE copper, 2 x independent copper and 2 x independent 1G/2.5G Fiber uplink ports
- Redundant 48-57VDC up to 490W back up power input
- IEEE 802.3bt class 0-8 PoE up to 90W per port
- Programmable PoE on 8 Ports
- PoE Port monitoring and auto recheck
- PoE port power start up delay
- 490W PoE budget
- 30 Gbps switch fabric for MP cameras
- Built in 6KV port surge protection
- Unique TimeZone reference for setting system synchronization
- G.8032 V1/V2 Rapid Ring protocol compliant
- Jumbo frame programming at all bandwidth settings
- Programmable port temperature settings
- Detail Syslog with Health status messaging
- LLDP and ACL connection status identification

Applications

- Transit vehicles and stations
- Schools and Offices buildings
- IDF/MDF applications
- High MP and PoE cameras
- Access Control

Description

Vigitron's Vi30210U is a high-performance, high-power PoE switch designed for seamless integration and efficient power delivery. Up to 8 copper ports support IEEE 802.3af/at/bt Class 0-8 PoE, providing up to 90W per port, with a total PoE budget of 490W. Additionally, it is compatible with some non-standard PoE devices up to 74W, making it the perfect solution for powering cameras from various manufacturers and upgrading existing systems with devices requiring newer PoE types.

The Vi30210U has 2 combo copper and fiber uplink ports that offer independent connections for maximum system integration. A unique TimeZone program setting syncs system time with connected devices, eliminating the need for external NTP servers. The Vi30210U also monitors port connections and automatically re-applies PoE if a connection is lost, minimizing service disruptions. With a 30 Gbps switch fabric and high internal bandwidth, It is ideal for MDF (Main Distribution Frame) applications, connecting to remote switches. It is also compliant with G.8032 V1/V2 Rapid Ring protocol for enhanced network redundancy and reliability.

The Vi30210U is the ultimate PoE switch for demanding applications, delivering robust power and seamless connectivity for your network infrastructure. It supports a wide range of PoE devices, including PoE cameras and other network equipment, and is compatible with newer PoE types, ensuring your network can adapt to evolving technology. Smart PoE reconnection and time synchronization features enhance system stability and reduce downtime. High-performance switching and flexible connectivity options optimize network infrastructure.

The 30210U high internal bandwidth and is the perfect MDF solution to connect to remote switches.

- 490W PoE budget with IEEE 802.3af/at/bt up to 90W PoE per port.
- 2 x1G/2.5G fiber uplink ports
- 30 Gbyte switch fabric
- G.8032 V1/V2 Rapid Ring protocol compliant

†2.5Gbps limited to Fiber ports only

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Technical Specification*

Electrical

Ethernet Interface	Standard: 10/100/1000BaseT
Uplink	2x 100/1000Mbps Copper, 2 x 1G/2.5G Fiber SFP
Data Ports	10 Copper ports, 2 Copper/MSA Fiber Combo ports
Packet Size	9600@ 100Mbps/1000Mbps/2500Mbps
Bandwidth Sensing	MDI/MDIX
Switch Fabric	30GB
Surge Protection	6KV
Input Power	48-57VDC up to 500W Maximum
PoE Output	802.3af/at/bt complaint, 90W Max.per port, Compatible to most non standard high power PoE
PoE Budget	490W
Power Consumption	12.3W
Status LEDs	Power : Red LED System : RedLED Link/Activity 1G: Orange (Ports 9-10) Link/Activity 100: Green (Ports 9-10) PoE : Green Active Fiber Link : Green LED
Connectors	Standard Ethernet : 10 x RJ-45 Connectors Console : 1 x RJ45 Fiber Optics : 2 x MSA compliant SFP Connector Power : Detachable Terminal Blocks Alarm Output : 6-pin Terminal block
ESD Protection	Mode2KV,ESD: 15KV, Support EMC EN55032 standard
RFC	2544 TCP/IP Packet Transmission 768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility	IEEE 802.3af/at/bt Class 0-8
Ring protocol	G.8032 V1/V2 <=50ms

Regulatory

FCC Emmissions	Part 15, Subpart B, Class B 2010 EN 5502:2006+A1:2007 EN 61000-3, EN55032, EN55035 EN50121, EN50155 2:2006+A1:2009+A2:2009
Safety	LVD CE, EN 62368 (Replacing EN60950-1)
Environmental	RoHS IEC60068-2-32 (Free Fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
WEEE,	Article 11 – Anex V Directive 2012 2012/19/EU

Environmental

Temperature	Operating: -40°C to +75°C Storage: -40°C to +80°C
Humidity	0 to 95%, non-condensing

Mechanical

Dimensions	2x6.6x4.4 in., 5x16.8x11 cm (HxWxL)
Weight	1.9 lb, 862 g
Mounting	Desktop, DIN Rail
Material	Aluminum

Accessories

DIN Rail Adapter
Desk Mount Brackets
Console Cable
USB Memory with Operations Manual

Optional Accessories

Vi1120	120W/56VDC Desktop Power Supply
Vi10120	120W/56VDC DIN Rail Power Supply
Vi10240	240W/56VDC DIN Rail Power Supply
Vi10480	480W/56VDC DIN Rail Power Supply

Ordering Information

Part No.	Description
Vi30210U	Hardened 10-Port Industrial 90W PoE Ring Switch

Related Products

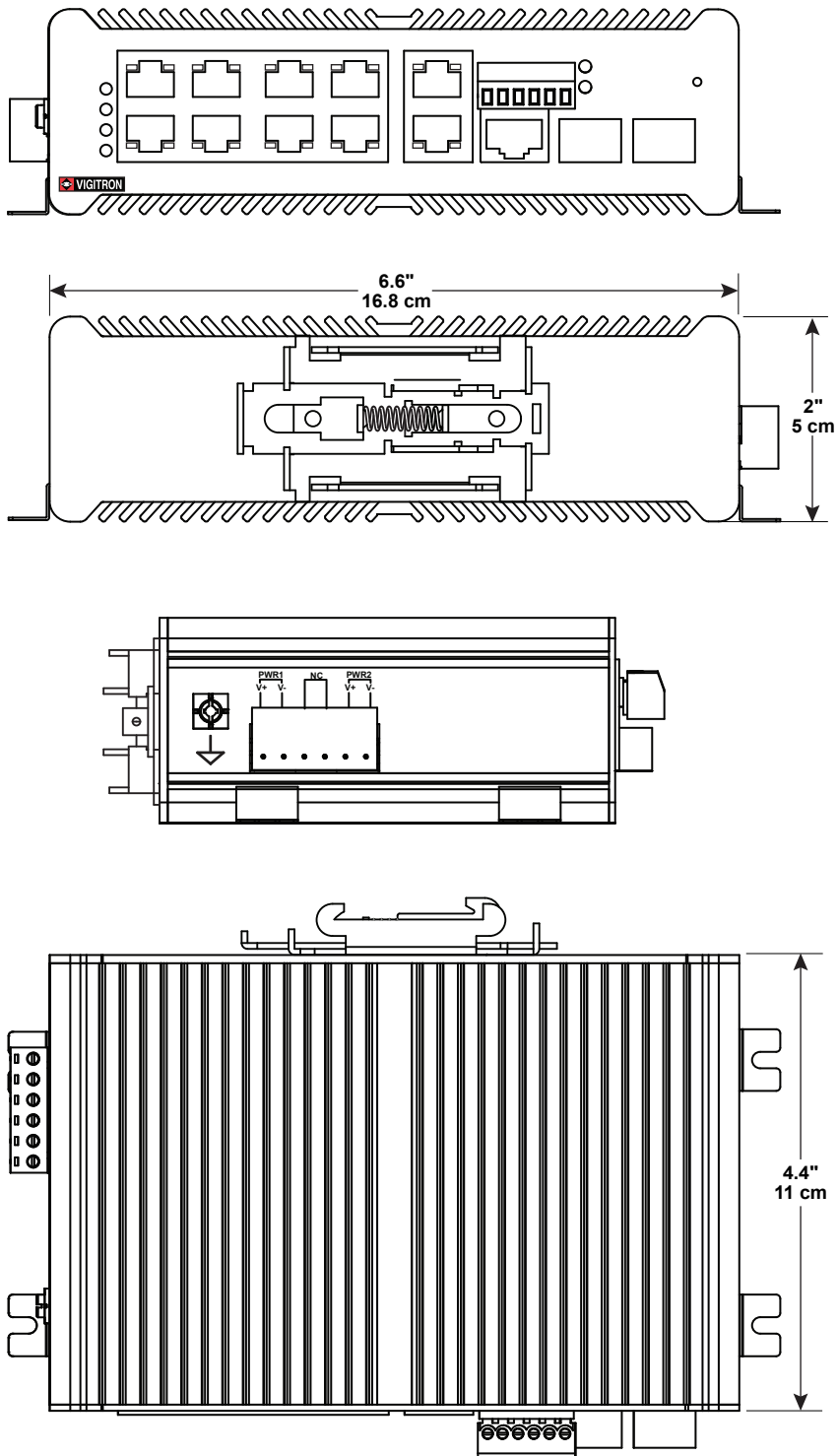| Part No.	Description
Vi30208U	Hardened 8-Port Industrial 90W PoE Ring switch
Vi10120	DIN Rail 120W/56VDC Power Supply
Vi10240	DIN Rail 240W/56VDC Power Supply
Vi10480	DIN Rail 480W/56VDC Power Supply

*Specifications subject to change without notice.

Mechanical Drawings

6.6"
16.8 cm

2"
5 cm

PWR1 NC PWR2
V+ V- V+ V-

4.4"
11 cm

Application Diagrams

Powering High Power PoE Cameras

Non-PoE Switch

60W PoE IR

56VDC **Vi10480**

Vi30210U

PoE Cameras

Data + 90W PoE
328 ft. (100m)

Data
328 ft. (100m)

PoE Cameras

Data + 90W PoE
328 ft. (100m)

Data + 90W PoE
328 ft. (100m)
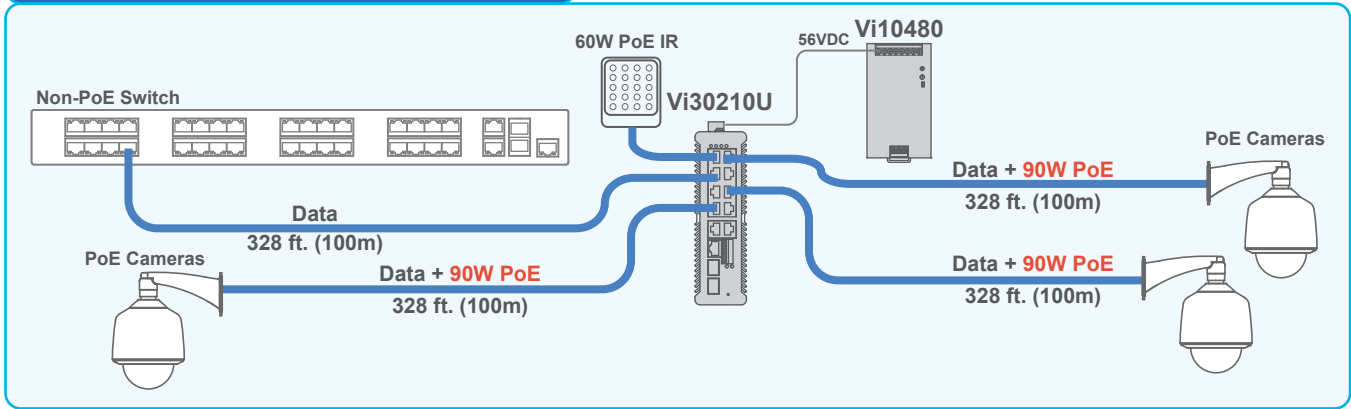
The Vi30210U and Vigitron Hardened power supplies can power multiple high power PoE PTZ Cameras up to 90W.

The Ring Network Configuration

Non-PoE Switch

Vi10240 **56VDC**

Vi30210U

PoE Camera

Data + 90W PoE
328 ft. (100m)

Data
328 ft. (100m)

Vi10240 **56VDC**

Vi30210U

60W PoE IR

PoE Camera

Data + 90W PoE
328 ft. (100m)

Data
Long Distance

Vi10240 **56VDC**

Vi30210U

PoE IR

90W PoE Camera

Data + 90W PoE
328 ft. (100m)

Data
Long Distance
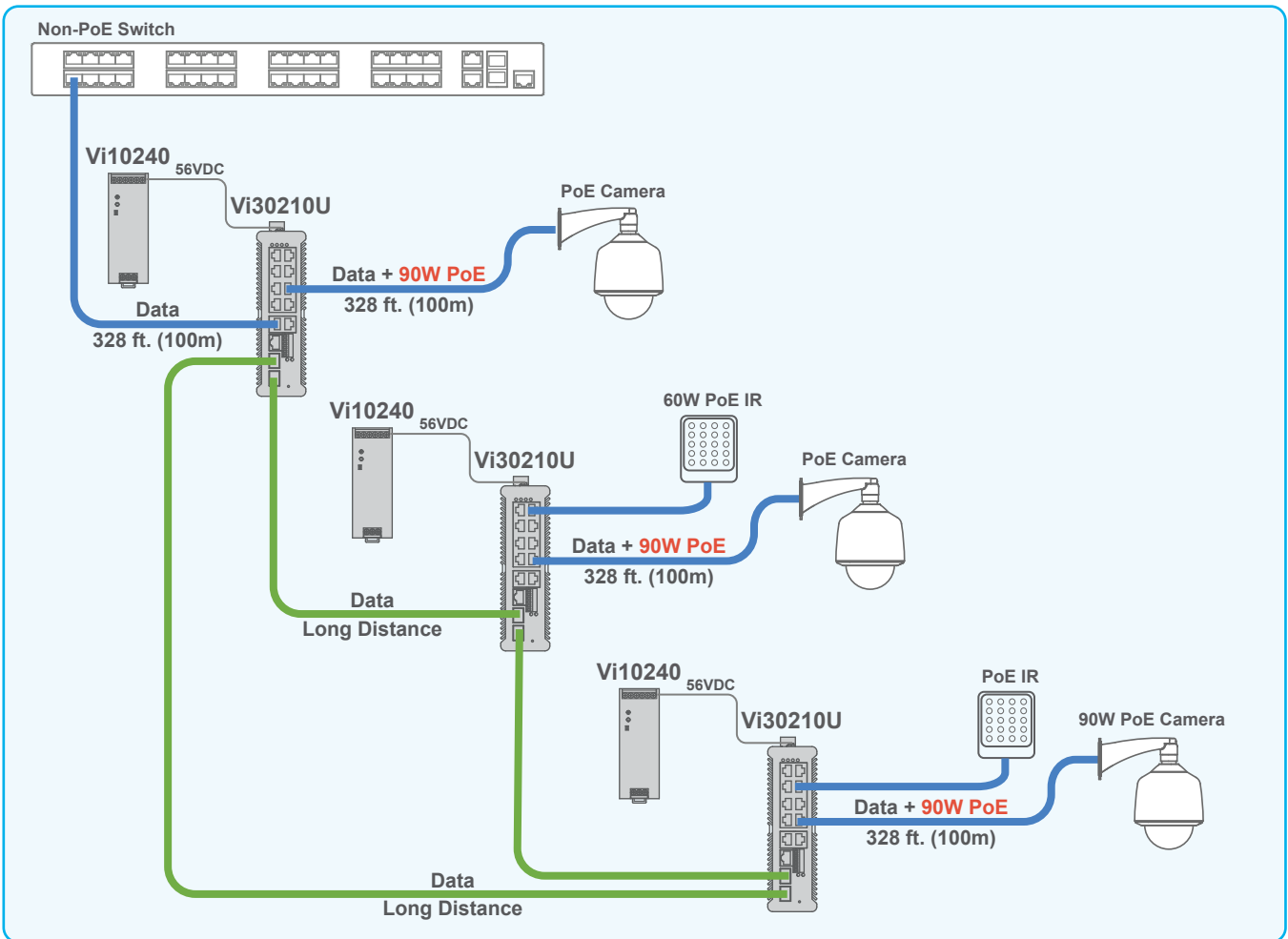
Multiple Vi30210Us can be used in a Ring Network configuration to increase the reliability of the network.