

## VX-GPU2610-9

L2+ Managed GbE UPOE Switch





#### Overview

The VX-GPU2610-9 from Versa Technology is an L2+ Managed POE++ Switch offering better PoE functionality and usability. The VX-GPU2610-9 includes advanced L3 features such as Static Route that delivers better cost performance and lower total cost of ownership in Enterprise networks. It also supports Universal Power Over Ethernet (UPOE), ports 1 to 8, with a per port max. wattage of 90W and a total PoE output power of up to 740W.

The VX-GPU2610-9 delivers 8 (10M/100M/1G) RJ45 with shared UPOE ports, 2 Combo GbE RJ45/SFP ports and RJ45 Console port. The VX-GPU2610-9 provides high HW performance and environment flexibility for SMBs and Enterprises.

Versa's VX-GPU2610-9 is ideal for delivering management simplicity, intuitive user experience, and lower total cost of ownership. The embedded Device Managed System is designed to be extremely easy-to-use, manage and install; IP phones, IP cameras, high power wireless APs or LED lighting for enterprise applications.

#### Benefits

Feature-Rich Ethernet Switch for Enterprise-Class

The switch delivers advanced functionality in L2+ managed switch including Layer 3 static route, DHCP server, IPv6 support, LLDP, etc. It also has comprehensive security features such as IP source guard and ACL to guard your network from unauthorized access. It helps users to build on the market-leading price/performance with L2+ Managed GbE PoE switch, and provide secure, reliable and ease of use for enterprise/SMB deployments.

Easy to Install, Configure and Troubleshoot Through the Device Management System (DMS)

The DMS provides embedded functions to facilitate devices management at anytime and anywhere. Its user-friendly interface helps users to manage devices intuitively. It supports various IP device types (e.g. IP-phone, IP-camera, WiFi-AP) for end users to enhance manageability and save time/cost during installation/maintenance stages.

Lower Total Cost of Ownership (TCO) with Energy-efficient Design

The unit is designed to help customers to reduce power consumption and lower the TCO with IEEE's 802.3az Energy Efficient Ethernet features. It can be used to build a green Ethernet networking environment.

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#### Universal Power over Ethernet Design

Universal Power Over Ethernet (UPOE), which extends the IEEE Power over Ethernet Plus (PoE+) standard to double the power per port to 90 watts, options to power IP devices with power-saving features like Power scheduling and PoE configuration.

### **Key Features**

- L2+ Managed features provide easier manageability, robust security and QoS.
- Built in Device Management System (DMS)
- DHCP Server
- IPv4/IPv6 Management
- PoE Port configuration and scheduling
- IEEE 802.3af/at/bt POE++ standard, also UPOE
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet

## **Specifications**

**Port Configuration** 

- 8 RJ45 (10M/100M/1G)
- 8 UPOE 90W (Ports 1 to 8)
- 2 RJ45/SFP Combo Uplinks (100M/1G)
- RJ45 Console

Hardware Performance

- Forwarding Capacity: 14.88 Mpps
- Switching Capacity: 20 Gbps
- · Mac Table: 8 K
- · Jumbo Frames: 9216 Bytes

Environmental Range

- Operating Temperature: 0 to 40°C (32° to 104°F)
- Storage Temperature: -20° to 70°C (-4° to 158°F)
- Operating Humidity: 10% ~ 90% (non-condensing)
- Altitude: < 3,000M (< 10,000ft.)</li>

Dimension (WxHxD)

442mm x 44mm x 211mm (17.40in x 1.73in x 9.05in)



**AC Input Voltage** 

• 100-240 VAC

**AC Input Frequency** 

• 50 ~ 60 Hz

**PoE Power** 

Each of the 1-8 ports support UPOE within available PoE Power

740W

Regulatory Compliance

- CE, FCC Part 15 Class A
- · LVD, Others by Request

## **Software Features**

#### **Layer 2 Switching**

Spanning Tree Protocol (STP)

- · Standard Spanning Tree 802.1d
- · Rapid Spanning Tree (RSTP) 802.1w
- Multiple Spanning Tree (MSTP) 802.1s

Trunking

Link Aggregation Control Protocol (LACP) IEEE 802.3ad

- Up to 5 groups
- Up to 10 ports per group

VLAN

Support for up to 4K VLANs simultaneously (out of 4096 VLAN IDs)

- Port-based VLAN
- 802.1Q tag-based VLAN
- MAC-based VLAN
- Management VLAN
- Private VLAN Edge (PVE)
- Q-in-Q (double tag) VLAN
- Voice VLAN
- GARP VLAN Registration Protocol (GVRP)

**DHCP Relay** 

- · Relay of DHCP traffic to DHCP server in different VLAN
- · Works with DHCP Option 82



# IGMP v1/v2/v3 Snooping

IGMP limits bandwidth-intensive multicast traffic to only the requesters.
 Supports 1024 multicast groups

IGMP Querier

 IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router

**IGMP Proxy** 

 IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router

MLD v1/v2 Snooping

Delivers IPv6 multicast packets only to the required receivers

#### **Device Management System (DMS)**

**Graphical Monitoring** 

- Topology view: Support intutive way to configure and manage switches and devices with visual relations.
- Floor view: It's easy to drag and drop PoE devices and help build you to build smart workforces.
- Map view: Enhance efficiency to drag and drop devices and monitor surroundings on a Google map

Find my Switch

· Search your real switches quickly and manage directly

**Traffic Monitoring** 

 Display visual chart of network traffic of all devices and monitor every port at any time from switches

Trouble Shooting

- Network diagnostic between master switch and devices
- Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading

## **Layer 3 Switching**

IPv4/ IPv6 Static Routing

· IPv4/ IPv6 Unicast: Static routing

## **Security**

Secure Shell (SSH)

• SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported



## Secure Sockets Layer (SSL)

 SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch

#### **IEEE 802.1X**

- IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions
- Supports IGMP-RADIUS based 802.1X
- · Dynamic VLAN assignment

## Layer 2 Isolation Private VLAN Edge

 PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks

### **Port Security**

· Locks MAC addresses to ports, and limits the number of learned MAC address

#### IP Source Guard

• Prevents illegal IP addresses from accessing specific ports on the switch

#### RADIUS/TACACS+

• Supports RADIUS and TACACS+ authentication. Switch as a client

#### Storm Control

 Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port

## **DHCP Snooping**

 A feature acts as a firewall between untrusted hosts and trusted DHCP servers

#### ACI s

Supports up to 256 entries. 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
- TCP flag

### **Quality of Service**

Hardware Queue

· Supports 8 hardware queues



### Scheduling

- Strict priority and weighted round-robin (WRR)
- Queue assignment based on DSCP and class of service

#### Classification

- Port based
- 802.1p VLAN priority based
- IPv4/IPv6 precedence / DSCP based
- Differentiated Services (DiffServ)
- Classification and re-marking ACLs

### Rate Limiting

- Ingress policer
- · Egress shaping and rate control
- · Per port

### Management

#### **DHCP Server**

· Supports DHCP server to assign IP to DHCP clients

## Remote Monitoring (RMON)

 Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis.

## **Port Mirroring**

 Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.

#### **UPnP**

 The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play

#### s-Flow

• The industry standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats

## IEEE 802.1ab (LLDP)

- Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network
- Support LLDP-MED extensions

#### Web GUI Interface

Built-in switch configuration utility for browser-based device configuration



#### CLI

• For users to configure/manage switches in command line modes

#### **Dual Image**

Independent primary and secondary images for backup while upgrading

#### SNMP

 SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)

## Firmware Upgrade

- Web browser upgrade (HTTP/ HTTPs) and TFTP
- · Upgrade through console port as well

#### **NTP**

 Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched

## Other Management

- HTTP/HTTPs; SSH
- DHCP Client/ DHCPv6 Client
- Cable Diagnostics
- Ping
- Syslog
- Telnet Client
- IPv6 Management

## **Power over Ethernet (PoE)**

#### **Port Configuration**

• Supports per port PoE configuration function

## PoE Scheduling

• Supports per port PoE scheduling to turn on/off the PoE devices (PDs).

### **Auto-Checking**

• Checks the link status of PDs. Reboot PDs if there is no responses.

## **Power Delay**

 The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs

### Soft-Reboot PoE Non-Stop

• The switch will keep providing power to the PDs while during soft-reboot.