Dray Tek

VigorSwitch P2280

PoE L2 Managed Gigabit Switch



- Dual-stack IPv4/IPv6 conformity for the next generation network
- 24 x Gigabit Ethernet with additional 4 combo UTP/SFP ports for maximum connectivity
- 802.3at PoE+ with 340W budget, with schedule providing power at right time
- Support LLDP-MED and SNMPv3 for best management software compatibility
- Advanced Multicast & QoS for application traffic control and prioritization
- AAA with 802.1x to provide host authentication control
- Access Control List, DHCP Snooping with IP Source Guard provides full advanced control of your network

The VigorSwitch P2280 is a L2 managed PoE switch designed for small to medium sized businesses. To cater for high bandwidth traffic, it is equipped with 24 Gigabit Ethernet ports for the LAN side, and 4 combo UTP/SFP ports for the backbone side. VigorSwitch P2280 is equipped with extensive facilities for maximizing your LAN performance, VLAN capability to allow flexible network design, and QoS capability for flexible bandwidth control. Furthermore, the power saving by IEEE802.3az EEE can offer you a green Ethernet networking environment.

The VigorSwitch P2280 also offers power to all these ports with Power of Ethernet (PoE) capability. All PoEenabled devices for the business usages, such as IP phones, wireless AP or IP Cameras can all rely on VigorSwitch P2280 switch for the power supply, you are free to position equipment wherever they should be, not being limited by the power outlet.

Virtual LAN

VLAN provides a way for businesses to assign network functions to different workgroups, branches, sections, employees or visitors, according to their operational requirements. VigorSwitch P2280 offers the Layer 2 Isolation feature (tag-based) VLAN for the groups.

The Voice and Surveillance VLAN of VigorSwitch P2280 assigns a preset VLAN profile with appropriate level of QoS for VoIP traffic to devices of VoIP and Surveillance related. This ensures that voice and camera related traffic will not be delayed because of inappropriate priority treatment.

QoS (Quality of Service)

With DrayTek VigorSwitch P2280, the QoS feature provides eight internal queues to support eight different classifications of traffic. High priority packet streams experience less delay inside the switch, which supports lower latency for certain delay-sensitive traffic. The switch classifies the packet as one of the eight priorities according to 802.1p priority tag, DiffServ and/or DSCP based. The QoS operates at full wire speed.

Energy efficiencyThe VigorSwitch P2280 is fully compliant with IEEE802.3az which is an energy efficient Ethernet protocol. The Power saving using Power Management techniques to detect the client idle and cable length automatically and provides the different power. The latest application-specific integrated circuits (ASICs), using lower-power technology, allow for lower power consumption and thinner, more efficient designs.

Advanced network security

Network security is a lifeline for modern day businesses, and is multi-faceted. To manage remote access, VigorSwitch P2280 supports SSH, SSL and SNMPv3 connection with encrypted packet content for each session. To prevent illegal access of data ports, it supports IP Source Guard which blocks illegal IP addresses for accessing specific ports or receiving data packets. To manage access to port-based network devices, it supports IEEE 802.1X port security standard. And, to prevent illegal logins, it supports Access Control List (ACL) function, ensuring only authorized users can access designated network resources.

PoE for Efficient Installation

24-PoE ports allow power to be supplied to end devices, such as Wireless AP, IP Phones and IP cams, directly through the existing LAN cables, eliminating costs for additional AC wiring and reducing Installation Cost. It frees your wireless AP deployment from restriction due to power outlet location. PoE also comes with schedule feature to provide power in a timely manner, lowing your bill of electricity.

Bandwidth Aggregation

The Gigabit ports can be combined together to create a multilink load-sharing trunk. Port trunks are useful for switch-toswitch cascading, providing very high full-duplex speeds.

Multicast Efficient for IPv4/IPv6

VigorSwitch P2280 can help you control and minimize the multicast traffic by IGMP/MLD Snooping and Multicast filtering. The IGMP/MLD Snooping listens to whom requesting multicast traffic, and forward these traffic only when needed. Multicast filtering helps you to block unwanted multicast traffic from specific group.



IP Version

- IPv4
- IPv6

Standard Compliance

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-T
- IEEE 802.3ab 1000Base-T
- IEEE 802.3x Flow Control Capability
- ANSI/IEEE 802.3 Auto-negotiation
- IEEE 802.1p Class of Service
- IEEE 802.1d Spanning Tree
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ad Port Trunk with LACP
- IEEE 802.1x Port Based Network Access Control
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- IEEE 802.1az Energy Efficient Ethernet

QoS

- Support 8 Queues
- Rate Limit
 - · Port-based (Ingress/Egress)
- Queue Setting
 - WRR
 - · Strict Priority
- Class of Service
 - 802.1p CoS
 - DSCP
 - · CoS-DSCP
 - · IP Precedence

Security

- Storm Control
 - Broadcast, Unknown Multicast, Unknown Unicast
- DoS Defend
- Protected Port
- Access Control List
 - · MAC/IPv4/IPv6
- Port Security
- IP Source Guard and ARP Inspection
- DHCP Snooping with Option 82

Multicast

- Up to 256 Multicast Groups
 - · Multicast Group Filtering/Throttling
- IGMP Snooping v2/v3 (BISS)
- MLD Snooping v1/v2(Basic)
 - · IGMP/MLD Querier
 - · Immediate Leave
- Multicast VLAN Registration

Link Aggregation

- Support 8 Link Aggregation Groups with Static & LACP types
 - · Up to 8 Ports for Each Group
- Support Traffic Load Balancing

VLAN

- IEEE 802.3Q VLAN
 - Tag-based
 - Port-based
- QinQ (Basic)
- General VLAN Registration Protocol
- Supports Following Types of VLANs
 - · Voice VLAN (OUI Mode)
- · Surveillance VLAN (OUI Mode)
- · Protocol VLAN
- · MAC-based VLAN
- · Management VLAN

PoE

- PoE Mode: Switch allocates sufficient power the PoE PD asked for, and dynamically distribute power to all devices.
- Status:
- Status includes class and consumed power by PDs.
- Scheduling
 - Support scheduling rules, applying multiple ports.
- Power Limit
 - Supports customizing maximum supplying power per port.

Environmental / Physical

- Power
 - · Voltage: 100 ~ 240VAC
 - PoE Power Budget: 340 Watt
- Temperature
 - Operating: 0 ~ 40°C
 - Storage: -20 ~ 70°C
- Humidity
 - · Operating: 10 to 90%RH (Non-condensing)
 - · Storage: 5 to 90% RH (Non-condensing)
- Dimension: 45(H) x 441(W) x 270(D) mm

Management

- Multiple User Account
- · Two-level Security (Admin/User)
- HTTP(s) Web User Interface
- Simple Network Time Protocol
- Link Layer Discovery Protocol
- · LLDP-MED, Media Endpoint Discovery Extension
- Simple Network Management Protocl v1/v2c/v3
- Support Generic Traps
- Command Line Interface (CLI) via Telnet/SSH
- DrayTek Switch Management

AAA

- 802.1x Single/Multiple
 - Port-based
- MAC-Based
- Guest VLAN
- External AAA server using RADIUS

Diagnostics

- CPU/RAM/Port Utilization
- Syslog
 - · Violate/Non-Violate Memory
- External Server
- Port Mirroring
- Ping
- Port-based Cable Test

Hardware Interface

- 24 x 10/100/1000Mbps Giga Ethernet with PoE+ PSE, RJ-45 (Each Port can Support Both IEEE 802.3af / 802.3at Mode)
- 4 x GbE Combo Ports, RJ45 + SFP
- 1 x Factory Reset Button
- 1 x Console Port, RJ45

