

PRODIGY LAYER 2 AGGREGATION SWITCH

PD1-S21-2161POE

Hi-performance Gigabit Ethernet Switch

FEATURES

Excellent performance

- 32Gbps backplane bandwidth, hardware forwarding and wire-speed L2 packet forwarding rate
- Gigabit optical-fiber transmission with up to 80Km distance and directly connecting the MAN backbone network

High security and reliability

- Providing multiple user authentication modes such as 802.1x authentication
- Powerful ACL and hardware supporting L2 to L7 data filtration
- Port-MAC-IP bind
- Special ARP invasion detection to effectively stop ARP cheat
- Hardware IPv6 ACL

Flexible and various management

- The straight-through cable and the intercrossed cable can be automatically identified.
- Adopting the cluster technology; supporting device cascading; managing uniquely through a unique IP address; saving address resources
- Multiple management modes such as Console port, Telnet, Web and SNMP are supported.
- Supporting multiple general network management protocols like Broad Drictor, HP Open View and Cisco Works 2000

Powerful flow and broadcast management

- The detection of IGMP packets is supported.
- The flow control can be realized in full-duplex mode or half-duplex mode.
- The rate limitation in a minimum step of 64K is supported on the Ethernet interface.
- IP multicast and QoS are supported.
- Flexible QinQ realizes the QinQ function based on the five-element group.

Varied protocols

- POE switches support 802.3af power supply on all their ports.
- POE switches already support 802.3at power supply. The maximum power supply on each port can reach up to 30W.
- POE switches support the configuration of power-supply priority, guaranteeing continuous power supply at those key network nodes.
- The POE switches support configuring the power consumption of power supply on their ports, saving the power and reducing users' cost.

TECHNICAL SPECIFICATIONS

Network Protocol & Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-X
- IEEE 802.3x full-duplex flow control
- IEEE 802.3af (Power over Ethernet)

Interface

- 16 10/100M RJ-45 MDI/MDI-X auto-adaptable interfaces
- 2 gigabit optical/electrical port
- One Console port

Performance

Processor : RISC 200MHz
Flash : 8MB
Memory : 32MB
Forwarding rate : 10.7Mpps
Backplane bandwidth : 32Gbps
Switching mode : Store forwarding
Address table : 8K
Queue buffer : 64MB
Specifications : 442*315*44mm
Power : Up to 400W (including POE power supply)
Indicator : Power indicator, system indicator, connection /data forwarding indicator, 10/100M indicator

STP : IEEE 802.1D STP
 IEEE 802.1w RSTP
 IEEE 802.1S MSTP

VLAN : Supporting port-based VLAN
 802.1Q-tagged VLAN
 QinQ, flexible QinQ
 Private Vlan
 GVRP dynamic VLAN configuration

Flow Control : Backpressure is adopted for half-duplex, while IEEE802.3x is adopted for full-duplex.

CAR is supported; a 64K step limitation is conducted to the 100M port, and a 8M step limitation is conducted to the gigabit port.

Broadcast control : The broadcast storm is constrained. When the threshold value for controlling the broadcast storm is reached, the broadcast packets are stopped from being forwarded.

Multicast control : IGMP Snooping of multicast packets, IGMP v1/v2/v3

Interface binding : Each port binding group contains up to 8 ports, and 6 port binding groups are supported meanwhile. Supporting dynamic LACP or static aggregation

Port mirroring : Supporting flow-based mirroring and the or port

Cascading : Stacking 32 switches. Adopting the cluster technology; managing uniquely through a unique IP address; saving address resources

Security features :

- IEEE 802.1x port authentication
- Port security
- Hardware supporting IP ACL, MAC ACL and Vlan ACL
- Hardware supporting dhcp snooping
- Hardware supporting DAI and static/dynamic ARP prevention
- Supporting user authentication through Web page
- Supporting remote RADIUS and "TACACS + authentication"
- Supporting hierarchical user management and password protection

Service quality :

- Head Of Line (HOL) mechanism
- Four transmission queues on each port are mapped to eight priority values of 802.1p.
- WRED, WFQ, SP and FIFO
- Best-effort service
- Differentiated service
- Strict priority
- Weighted round robin
- First come first served
- TOS re-labeling
- RTS

Network management :

- SNMP v1/v2
- RMON (groups 1, 2, 3, 9)
- Telnet
- CLI page
- WEB page
- Supporting the general NMS software, Broad Drictor
- Supporting NTP
- Supporting SSH
- Supporting PDP (compatible with Cisco CDP)

Power Requirements

47-63Hz, 1A/230V, or 60V broadcast & TV power Supporting POE power supply or supporting POE plus power supply

Physical Characteristics

Dimensions (LxWxH) (mm) : 442*315*44mm
Weight (kg) : < 5 kg

Environmental Limits

Operating Temperature: 0 ~ 50°C,
non-operating Temperature: -40 ~ 70°C
Humidity: 0 ~ 90% (no condensing)

Warranty

1 year

OPTIONAL ACCESSORIES

For Optional Fiber Module, please refer to Spectrum Terrabit Transceiver.

ORDERING INFORMATION

Model	Description
PD1-S21-2161POE	Network management Switch, 16 ports10/100/ TX, 2 gigabit optical/electrical port 10/100/1000M TX/Gigabit SFP

For enquires, please email to sales@terrabitnet.com