

PRODIGY LAYER 2 AGGREGATION SWITCH

PD1-S21-5281GX

Hi-performance Gigabit Ethernet Switch

FEATURES

Excellent performance

- 104Gbps backboard bandwidth, uncongested design and full wire-speed forwarding
- 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

Flexible and various management

- Automatically identifying the straight-through cable and the intercrossed cable
- Adopting the cluster technology; supporting device stacking; managing uniquely through a unique IP address; saving address resources
- Supporting multiple management modes such as Console port, Telnet, Web and SNMP
- Supporting multiple general network management protocols like Broad Director, HP Open View and Cisco Works 2000

Powerful flow and broadcast management

- Automatically detecting and controlling broadcast storms, monitoring IGMP packets and effectively preventing broadcast packet's flooding
- Supporting flow control in full-duplex mode or half-duplex mode
- The rate limitation in a minimum step of 64K is supported on the Ethernet interface.
- Supporting IP multicast and QoS

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

Interface

- 24 GE SFP ports
- 4 GE Combo ports
- 1 console port

Performance

- Backplane bandwidth** : 56Gbps
- Forwarding rate** : Full wire-speed filtering and forwarding
- Switching mode** : Store forwarding
- Mac table** : 8K
- Flow control** : Backpressure is adopted for half-duplex, while IEEE802.3x is adopted for full-duplex.
- Storm control** : Broadcast and multicast storm control
- Multicast** : IGMP snooping v1/2/3
- QoS** : 802.1p, 8 priority values, 4 priority queues
Head Of Line (HOL) mechanism
Best-effort service
Differentiated service
Strict priority
Weighted round robin
First come first served
TOS re-labeling
RTS

Aggregation : 8 interfaces can be bound in a group through dynamic LACP or static aggregation, and 8 groups can be supported simultaneously.

Stacking : Cluster

Bridging : IEEE 802.1D-1998 STP, path backup, IEEE 802.1w (RST) and IEEE 802.1s (MSTP)

VLAN : Port-based VLAN, 802.1Q VLAN, QinQ and GVRP

VLAN table : 4K VLANs

IP routing : Static route

Management : CLI, Telnet, SNMP and RMON

Network security : IEEE 802.1x, port-based access control, RADIUS, TACACS

Supporting DHCP snooping on the hardware

Supporting DAI and static/dynamic ARP prevention on the hardware

Supporting IP ACL, MAC ACL and VLAN ACL on hardware

Power Requirements

110~240VAC (auto-adaptable), 47-63Hz, 1A/230V
Or -36~-72V DC

Physical Characteristics

Dimensions (LxWxH) (mm): 442*180*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 - 5281 GX	Gigabit-Ethernet switch with 28 gigabit ports (1 console port, 24 gigabit SFP slots, 4 gigabit TX/SFP ports, 220VAC power supply)