Terrabit Networks

TERRABIT PRODIGY PD1-S31-4241-POE GE ROUTING SWITCH SERIES

PRODIGY

PD1-S31-4241-PoE

Hi-performance Gigabit Ethernet Switch

FEATURES

Excellent performance
12.8 Gbps switch fabric, hardware routing, wire-speed L3 forwarding rate: 9.6 Mpps.

High port density. 24 100M ports and up to 4 Gigabit ports.

120 -km transfer by Gigabit optical fiber, direct connection to WAN.

Security and reliability
IEEE 802.1x, VRRP

Powerful ACL supports L2-L7 data filtering.

Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'.

RPS power hot standby.

QinQ double VLAN security.

Easy maintenance
Automatic recognition for straight-through or crossover cables.

Stackable physically and through cluster technology. Central management with unified IP address saves IP addresses.

Management via CONSOLE port, Web, SNMP, Telnet, etc.

Support (Terrabit Networks) Prodigy Director, HP Open View, Cisco Works 2000.

Traffic and broadcast control
Auto-detection, restraining of broadcast storm and IGMP snooping effectively restrict broadcast flooding.

Full- and half- duplex traffic control.

Ethernet port rate limiting with 64 K step size.

IP multicast and QoS support.

Jumbo frame.

Routing protocols
Static routing.

Support RIP v1/v2, OSPF v2, BEIGRP, BGP v4 and many other dynamic routing protocols.

Support PIM-SM/DM.

Ethernet Ring
The ring-network protection protocol can resume network communication within 50 ms. A ring 16 elements, each element processing 16 ring.

TECHNICAL SPECIFICATIONS

Standard
- IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE802.1s MSTP
- 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), IEEE 802.3at
- IEEE 802.1x port-based user authentication
- QinQ double VLAN Security
- Port Security
- Hardware support for IP ACL, MAC ACL, VLAN ACL
- Hardware support for port-based user authentication by combinations and bandings of port, IP address, and MAC address
- Remote authentication through RADIUS
- User privilege classification and password protection
- IP Source Guard

Interface
Port & Slot: 24 10/100M support PoE, 4 GE TX/SFP ports 1 Console Port

Performance
Processor: MPC 266MHz
FLASH: 8 MB
Memory: 128 MB (up to 512 MB)
Switch Fabric: 12.8 Gbps
L3 Forwarding Rate: 9.6 Mpps, all wire-speed, with filtering
Switching Mode: Store-and-forward
MAC Address Table Size: 16 K
Queuing Buffer: 64 MB
Jumbo frame: 16383
Hardware Routing Table Size: 4 K
L2 multicast group: 1 K
L3 multicast group: 1 K
802.1Q VLAN: 1 ~ 4094, partition at will
LED Indicators: Power, system, link, activity, 10/100M
VLAN: Port-based VLAN, 802.1Q tag VLAN, VLAN Stacking (QinQ), Super VLAN, Private VLAN, GVRP dynamic VLAN configuration, 4K active VLANs
Traffic Control: Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 64 K step size
Storm Control: Broadcast/Multicast/Unicast
Multicast Control: IGMP snooping
Port Trunking: Up to 32 groups with up to 8 ports per group, dynamic LACP or static aggregation
Port Mirroring: Supported. Can be based on flow classification and based on port
Clustering: Up to 256, manageable through single IP
DDM: support

Ethernet OAM: 802.1ag, 802.3ah, ITU-T Y.1731, Support 256 MEP, 256 MA
Unicast: Static, RIP v1/v2, OSPF v2, BEIGRP (compatible with Cisco EIGRP), BGP v4, Intelligent forwarding to defend against virus attacks and illegal access
PBR: IP-based policy routing
Multicast: IGMP v1/v2/v3, PIM-SM/DM
Proxy: Proxy ARP, DNS Proxy
DHCP: DHCP Server/Client/Relay, DHCP option 82, IP Source Guard
NAT: Static or dynamic NAT
QoS:
- Head Of Line(HOL) blocking prevention mechanism
- 4 dispatching queues per port, mapping the 8 priority queues in 802.1p
- Best Effort Service
- Differentiated Service
- Strict Priority
- Weighted Round Robin
- First Come First Serve
- TOS re-tagging, RTS

Network Management:
- SNMP v1/v2/v3
- RMON(Group 1, 2, 3, 9)
- Telnet, Command Line Interface(CLI)
- Web interface, SNTP
- Support PRODIGY network management tools suite: Prodigy Director
- NTP, SSH, LLDP, TFTP/FTP

Power Requirements
Power Consumption: 400 W (max.)
AC input: AC 100~240 V, 47 ~ 63 Hz, 1A/230V, RPS power hot standby
DC input: -48VDC

Physical Characteristics
Dimensions (LxWxH) (mm): 442x385x44mm

Environmental Limits
Operating Temperature: 0 ~ 50°C
Nonoperating Temperature: -40 ~ 70°C
Humidity: 0 ~ 90% (no condensing)

OPTIONAL ACCESSORIES

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

ORDERING INFORMATION

Model	Description
PD1-S31-4241-PoE	Network management switch, 24 ports 10/100M PoE, 4 ports Gigabit TX/SFP Combo, AC
PD1-S31-4241-PoE-DC	Network management switch, 24 ports 10/100M PoE, 4 ports Gigabit TX/SFP Combo, DC