



## Prestel NS2-8C1-250P-2F1

10-port Full Gigabit Managed PoE Switch



[DATASHEET](#)

# 10-port Full Gigabit Managed PoE Switch



## OVERVIEW

is a full gigabit L2+ managed PoE fiber switch. It has 8\*10/100/1000Base-T RJ45 ports and 2\*100/1000Base-X SFP fiber slot ports. Port 1-8 can support IEEE802.3af/at standard PoE power supply. single port PoE power reaches 30W, and the maximum PoE output power is 130W(at-250W). As a PoE power supply device, it can automatically detect and recognize the power receiving equipment that meets the standard and supply power through the network cable. It can supply power to POE terminal equipment such as wireless AP, webcam, VoIP phone, building visual access control intercom through network cable, to meet the network environment that needs high-density PoE power supply, suitable for hotels, campuses, parks, supermarkets, scenic spots, Factory quarters and SMB small and medium-sized enterprises form a cost-effective network.

has L2+ full network management, support IPV4 management, static route full line rate forwarding, security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important Uninterrupted

communication for applications. According to the actual application requirements, you can configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.

## FEATURE

### ■ Gigabit access, Gigabit SFP fiber port uplink

- ◇ Support “Gigabit Ethernet port and Gigabit SFP port” combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

### ■ Intelligent PoE power supply

- ◇ 8\*10/100/1000Base-T RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- ◇ IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- ◇ Priority system for PoE port, it will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- ◇ PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

### ■ Strong business processing capability

- ◇ IEEE802.1Q VLAN, flexible VLAN division.
- ◇ QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including Equ, SP, WRR & SP+WRR.
- ◇ ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- ◇ IGMP V1/V2 and IGMP Snooping.
- ◇ STP/RSTP/MSTP.

- ◇ Static and dynamic aggregation.

### ■ Security

- ◇ 802.1X authentication.
- ◇ Port isolation, Storm control.
- ◇ IP-MAC-VLAN-Port binding.

### ■ Stable and reliable

- ◇ Low power consumption, galvanized steel casing, The fan active cooling.
- ◇ Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.
- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel, it can show the device status through the LED indicator of PWR, Link, PoE.

### ■ Easy operation and maintenance management

- ◇ Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- ◇ HTTPS, SSLV3, and SSHV1/V2.
- ◇ RMON, system log, LLDP, and port traffic statistics.
- ◇ CPU monitoring, memory monitoring, Ping test, and cable diagnose.

## TECHNICAL SPECIFICATION

| Interface Characteristics |   |
|---------------------------|---|
| Fixed Port                | 8*10/100/1000Base-T PoE ports (Data/Power)<br>2*100/1000Base-X uplink SFP slot ports (Data)<br>1 * RS232 console port(115200,N,8,1) |

|                           |   |
|---------------------------|---|
| Ethernet Port             | 10/100/1000Base-T(X), auto-sensing, full/half duplex MDI/MDI-X self-adaption  |
| Twisted Pair Transmission | 10BASE-T: Cat3,4,5 UTP(≤100 meter)<br>100BASE-TX: Cat5 or later UTP(≤100 meter)<br>1000BASE-T: Cat5e or later UTP(≤100 meter)                                 |
| SFP Slot Port             | Gigabit SFP optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC) |
| Optical Cable/ Distance   | Multi mode: 850nm / 0 ~ 500M, single mode: 1310nm/ 0 ~ 40KM, 1550nm /0 ~ 120KM.   |
| <b>Chip Parameter</b>     |   |
| Network Management Type   | L2+   |
| Network Protocol          | IEEE802.3 10BASE-T, IEEE802.3i 10Base-T<br>IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T<br>IEEE802.3z 1000Base-X, IEEE802.3x                                 |
| Forwarding Mode           | Store and Forward(Full Wire Speed)  |
| Switching Capacity        | 128Gbps   |
| Forwarding Rate@64byte    | 14.88Mpps   |
| MAC                       | 8K  |
| Buffer Memory             | 4.1M  |
| Jumbo Frame               | 10K   |
| CPU(Hz)                   | 500M  |
| DRAM                      | 1G  |
| Flash                     | 128M  |
| LED Indicator             | Power:PWR (yellow), system :SYS (green), network ;Link (yellow), POE: PoE (green), Fiber port: L/A(green)   |

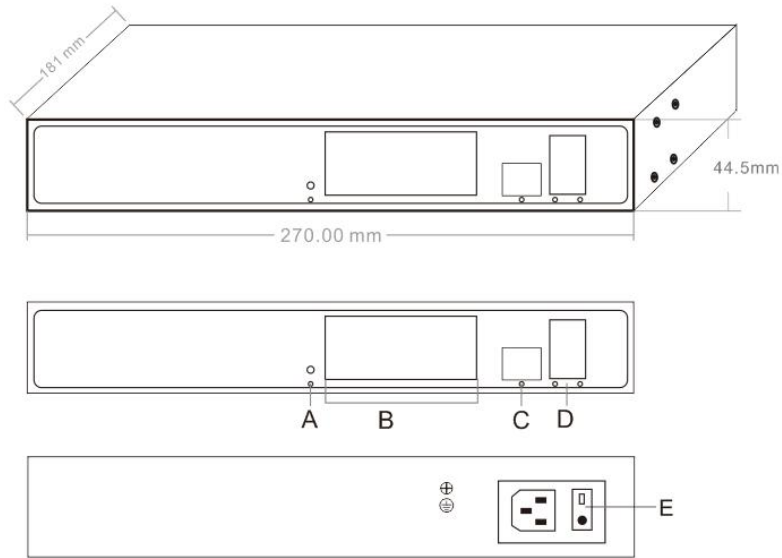
|   |   |   |
|---|---|---|
| Reset Switch                            | Yes, One-button factory reset   |   |
| <b>PoE &amp; Power</b>                  |   |   |
| PoE Port                                | Port 1 to 8 IEEE802.3af/at @ POE  |   |
| PoE Management                          | Total power limit of PoE power supply<br>PoE output power allocation, off& af &at<br>PoE output priority configuration<br>PoE working status<br>Delay start of power supply<br>Scheduling of PoE operation and time |   |
| Power Supply Pin                        | Default 1/2 (+), 3/6 (-)  |   |
| Max Power Per Port                      | 30W; IEEE802.3af/at   |   |
| Total PWR / Input Voltage               | 130W (AC100-240V)   | 250W (AC100-240V)                               |
| Power Consumption                       | Standby:<8W, Full load:<120W  | Standby:<10W, Full load:<240W                   |
| Power Supply                            | Built-in power supply, AC 100~240V 50-60Hz 2.3A   | Built-in power supply, AC 100~240V 50-60Hz 4.1A |
| <b>Physical Parameter</b>               |   |   |
| Operation TEMP / Humidity               | -20~+55°C;5%~90% RH Non condensing  |   |
| Storage TEMP / Humidity                 | -40~+75°C;5%~95% RH Non condensing  |   |
| Dimension (L*W*H)                       | 270*181*44.5mm  |   |
| Net /Gross Weight                       | <1.7kg / <2.2kg   |   |
| Installation                            | Desktop, Wall-mounted, 19 inch 1U cabinet   |   |
| <b>Certification &amp; Warranty</b>     |   |   |
| Lightning protection / protection level | Lightning protection: 4KV 8/20us; Protection level: IP30  |   |
| Certification                           | CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class   |   |

|                                    |   |
|------------------------------------|---|
|                                    | B; RoHS;  |
| Warranty                           | 3 years, lifelong maintenance.  |
| <b>Network Management Features</b> |   |
| Interface                          | IEEE802.3X (Full-duplex)<br>Broadcast storm control based on port speed<br>Port real-time traffic management (Flow Interval)<br>The speed limit of the message flow in the access port. The minimum particle size is 1Gbps.             |
| Layer 3 Features                   | L2+ Network management, IPV4 management<br>Static route, Default route @ 128 pcs, APR @ 1024 pcs  |
| VLAN                               | VLAN based on the protocol<br>4K VLAN based on port, IEEE802.1q<br>Port configuration of Access, Trunk, Hybrid  |
| Port Aggregation                   | LACP, Static aggregation<br>Max 5 aggregation groups and 8 ports per group.   |
| Spanning Tree                      | STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)  |
| Multicast                          | IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out<br>Multicast VLAN  |
| Port Mirroring                     | Bidirectional data mirroring based on port  |
| QoS                                | Flow-based redirection<br>Flow-based rate limiting<br>Flow-based packet filtering<br>8*Output queues of each port<br>802.1p/DSCP priority mapping<br>Diff-Serv QoS,Priority Mark/Remark<br>Queue Scheduling Algorithm (SP, WRR, SP+WRR) |
| ACL                                | Port-based Issuing ACL<br>ACL based on port and VLAN<br>L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL   |

|            |   |
|------------|---|
|            | based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.  |
| Security   | <p>IP-MAC-VLAN-Port binding</p> <p>ARP inspection, Anti-DoS attack</p> <p>AAA &amp; RADIUS, MAC learning limit</p> <p>Mac black holes, IP source protection</p> <p>Broadcast storm control, Backup for host datum</p> <p>SSH 2.0, SSL, Port isolation, ARP message speed limit</p> <p>User hierarchical management and password protection</p>                      |
| DHCP       | DHCP Client, DHCP Snooping, DHCP Server   |
| Management | <p>One-key recovery</p> <p>Cable Diagnose, LLDP</p> <p>Web Management (HTTPS)</p> <p>NTP, System work log, Ping Test</p> <p>CPU instant utilization status view</p> <p>Console/AUX Modem/Telnet/SSH2.0 CLI</p> <p>NMS - Smart Network Management System Platform (LLDP+SNMP)</p> <p>Download &amp; Management on FTP, TFTP, Xmodem, SFTP, SNMP</p> <p>V1/V2C/V3</p> |
| System     | <p>Category 5 Ethernet network cable</p> <p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer 10 or later;</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</p>                                      |



## DIMENSION



- A. Working Indicator
- B. 8\*10/100/1000M PoE Ports
- C. Console Port
- D. 2\*100/1000M SFP Ports
- E. Power Input Port 100-240V AC, 50/60Hz

## APPLICATION

