



Prestel NS3-48C1-600P-4F10

52-port 10G Uplink L3 Managed PoE
Fiber Switch



[DATASHEET](#)

Product Datasheet

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OVERVIEW

is a 10G uplink L3 managed PoE fiber switch. It has 48*10/100/1000Base-T RJ45 ports and 4*1/10G SFP+ fiber slot ports. Port 1-48 can support IEEE802.3af/at PoE standard. Single-port PoE power reaches 30W. 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, etc. through network cable, to meet the network environment that needs high-density PoE power supply. It is suitable for hotel, campus, factory dormitory and small and medium-sized enterprise.

has L3 full network management function, supports IPV4/ IPV6 management, dynamic route full-speed forwarding, complete 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) and (ITU-T G.8032) ERPS 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 wire speed access, 10G uplink

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit Ethernet port and 10G SFP+ uplink port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Intelligent PoE power supply

- ◇ IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- ◇ PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.
- ◇ 48*10/100/1000Base-T RJ45 ports can support POE power supply to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

■ Security

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

■ Strong business processing capability

- ◇ ERPS/STP/RSTP/MSTP.
- ◇ Static and dynamic aggregation.
- ◇ IGMP V1/V2 and IGMP Snooping.
- ◇ IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.

- ◇ 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.

■ **Stable and reliable**

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

■ **Easy operation and maintenance management**

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

TECHNICAL SPECIFICATION

Interface Characteristics	
Fixed Port	1*Console RS232 port (115200,N,8,1) 4*1/10G uplink SFP+ fiber slot ports (Data) 48*10/100/1000Base-T PoE ports (Data/Power)
Ethernet Port	Port 1-48 can support 10/100/1000BaseT auto-sensing,Full/half duplex MDI/MDI-X self-adaption

Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e/6 or later UTP(≤100 meters)
Optical Fiber Port	Gigabit SFP optical fiber port and 10G SFP+ optical fiber port, default no include optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Fiber Port Expansion	Support Turbo overclocking 2.5G optical module expansion and ring network
Optical Cable/Distance	Multi-mode:850nm/ 0-500M(1G), 850nm/0-300M (10G), Single-mode:1310nm/ 0-40KM, 1550nm/ 0-120KM.
Chip Parameter	
Network Management Type	L3
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X IEEE802.3ae 10GBase-LR/SR, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	368Gbps (non-blocking)
Forwarding Rate@64byte	131Mpps
CPU	Dual core 1GHz
DRAM	2GB
FLASH	256MB
MAC	32K
Buffer Memory	16MB
Jumbo Frame	12KB
LED Indicator	System: SYS (Green), Network:Link(Yellow), PoE: PoE (Green), Fiber port: L/A (Green)

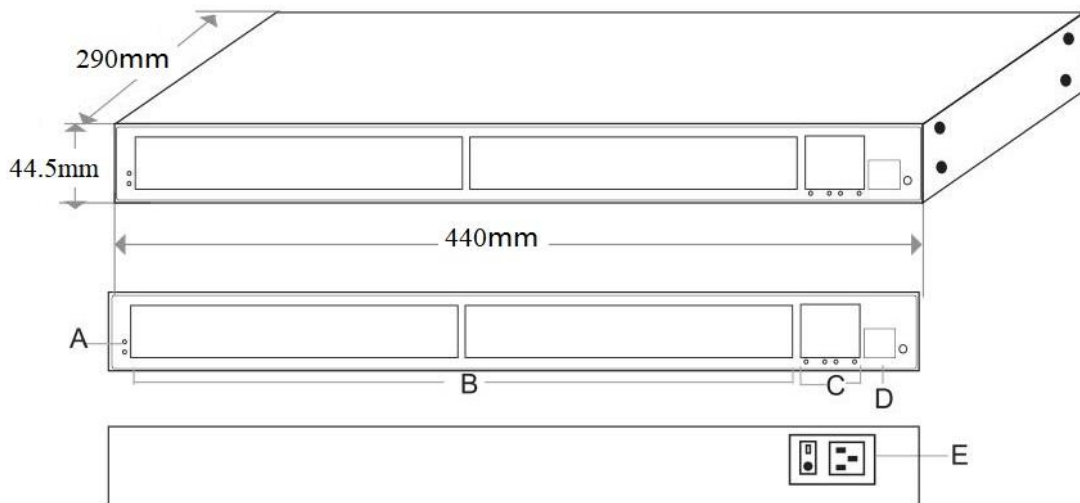
Reset Switch	Yes, press and hold the switch for 10 seconds and release it to restore the factory settings
PoE & Power Supply	
PoE Port	Port 1 to 48
PoE Management	PoE working status display, Port PoE on/off, af/at power distribution
Power Supply Pin	1/2 (+) 3/6(-)
Max Power Per Port	30W, IEEE802.3af/at
Power Consumption	Standby<30W, Full Load<600W
Power Supply	Built-in power supply, AC100~240V 50-60Hz 6.6A
Physical Parameter	
Operation TEMP/ Humidity	-20~+55°C, 5%~90% RH Non condensing
Storage TEMP/ Humidity	-40~+80°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<4.8kg / <5.5kg
Installation	Desktop, 19 inch 1U cabinet installation
Certification & Warranty	
Lightning Protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3 years, lifelong maintenance.
Network Management Features	
Interface	IEEE802.3x flow control (full duplex) Port exception protection mechanism Port real-time flow management (Flow Interval) Broadcast storm suppression based on port rate Optical port SFP module DDMI real-time digital diagnosis

	<p>Limit the rate of incoming and outgoing packet traffic, with a minimum granularity of 16Kbps and a maximum of 1Gbps</p> <p>Port EEE Green Ethernet Energy-Saving configuration and status view</p> <p>Jumbo frame configuration, the largest 12000byte</p>
Layer 3 Features	<p>IPV4 Equal Cost Routing</p> <p>NG protocol, maximum 1000 entries</p> <p>ARP protocol, maximum 1000 entries</p> <p>Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6</p> <p>IPV4/IPV6 VRRP, the maximum group is 255</p> <p>IPV4/IPV6 VLANIF interface supports up to 128</p> <p>IPV4/IPV6 static route/default route supports up to 128 entries</p> <p>IPV4 dynamic routing, RIPv1/v2, OSPFv2, BGP4+, 4000 routing entries</p> <p>IPV6 dynamic routing OSPFv3, BGP+, RIPng, IPV6 management, 1000 routing entries</p> <p>L3 network management function, IPV4/IPV6 dual-stack management</p> <p>Layer 3 routing and forwarding, support communication between different network segments and different VLANs</p>
VLAN	<p>VLAN based on MAC, VLAN based on the protocol</p> <p>Port configuration of Access, Trunk, Hybrid, GVRP VLAN protocol (4K) VLAN based on port, IEEE802.1q, Voice VLAN, QinQ configuration</p>
Port Aggregation	<p>LACP, Static aggregation</p> <p>Max 26 aggregation groups and 8 ports per group.</p>
Spanning Tree	<p>STP BPDU Guard, BPDU filtering and BPDU forwarding</p> <p>STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)</p>
ERPS Ring Network	<p>Support ERPS ring network, ring network self-healing time is less than 20ms, ITU-T G.8032</p>
Multicast	<p>MLD Snooping, IGMP Snooping, Multicast VLAN</p> <p>User quick log out, MVR (Multicast LAN registration)</p> <p>IGMP Snooping v1/v2/v3 and 1024 multicast groups at most</p>

Mirroring	<p>Bidirectional traffic mirroring for basic ports</p> <p>Supports 1-to-multiple mirroring, supports up to 4 port sessions</p>
QoS	<p>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</p> <p>Flow-based Rate Limiting, Stream based redirection</p> <p>Flow-based Packet Filtering, 8*Output queues of each port</p> <p>802.1p/DSCP priority mapping, Diff-Serv QoS, Priority Mark/Remark</p>
ACL	<p>ACL distribution based on port and VLAN</p> <p>L2-L4 packet filtering function, matching the first 80 bytes message, and provides ACL definitions based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc.</p>
Security	<p>Port based IEEE802.1X authentication</p> <p>SSL guarantees data transmission security</p> <p>Quad binding function of IP+MAC+VLAN+ports</p> <p>MAC address learning limit, MAC address black hole</p> <p>Anti DoS attack, Port broadcast message suppression</p> <p>IP Source Guard function, AAA&RADIUS certification</p> <p>Hierarchical user management and password protection</p> <p>SSH 2.0 provides a secure encrypted channel for user login</p> <p>Host data backup mechanism, ARP intrusion detection function</p> <p>Port isolation, IP Source Guard, ARP message speed limit function</p>
DHCP	<p>DHCP Client, DHCP Snooping, DHCP Server</p>
Management	<p>Web network management (https)</p> <p>Link Layer Discovery Protocol(LLDP)</p> <p>Viewing CPU Instant Utilization Status</p> <p>NTP clock, One click restore, SNMP V1/V2C/V3</p> <p>Cable status check, Ping detection, System work log</p> <p>platform cluster management (LLDP+SNMP) Console/AUX</p> <p>Modem/Telnet/CLI command line configuration</p>

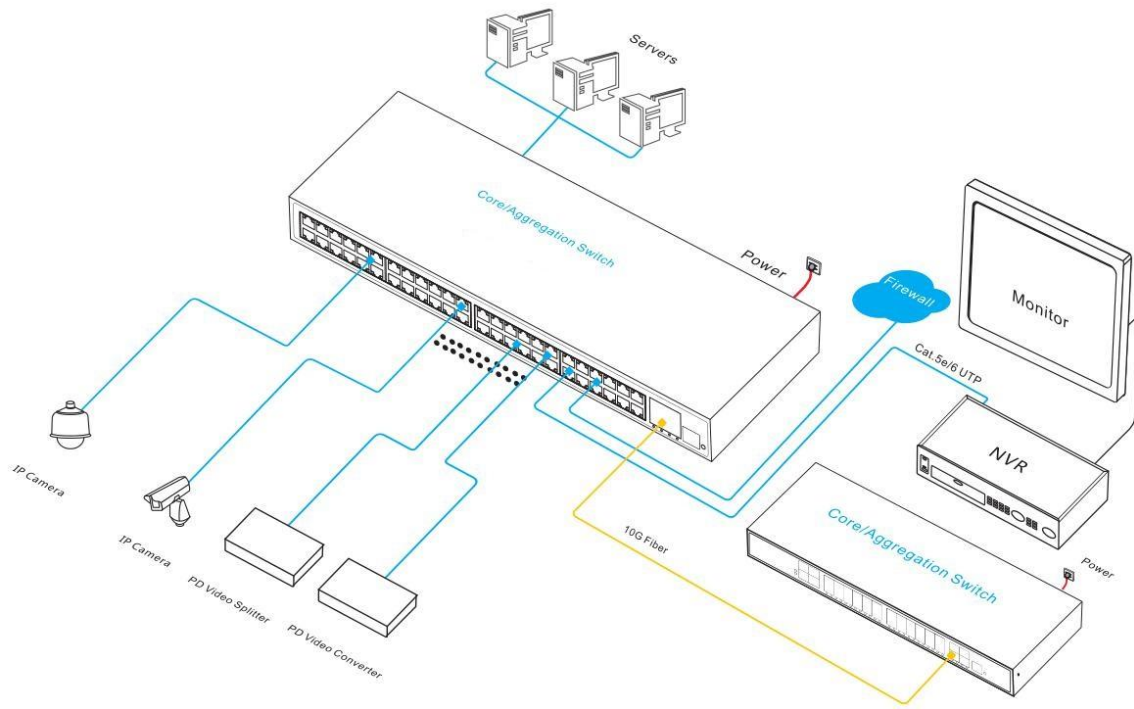
	FTP, TFTP, Xmodem, SFTP file upload and download management
System	<p>Category 5 Ethernet network cable</p> <p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</p>

DIMENSION



- A. Working indicator
- B. 48*10/100/1000M PoE ports
- C. 4*10G SFP+ ports
- D. Console port
- E. Power input port AC100-240V, 50/60Hz

APPLICATION



ORDERING INFORMATION

	Description	Built-in Power Supply
	L3 managed PoE switch with 48*10/100/1000M RJ45 ports and 4*1/10G SFP+ ports. Port 1-48 support IEEE802.3af/at PoE standard. Support 1U/19 inch rack installation.	600W

Note: The SFP optical module is not included by default and needs to be purchased separately.

PACKING LIST

	Content	Qty	Unit
Packing List	52-port 10G uplink L3 managed PoE switch	1	SET
	AC Power Cable	1	PC
	RJ45-DB9 Line	1	PC
	Mounting Kits(Hanging Ear)	1	SET
	User Guide	1	PC
	Warranty Card	1	PC