



52 Ports L2+ Managed PoE Switch

BI8148PGM4T-600W Series

❖ Overview

BI8148PGM4T-600W is managed PoE switch for security transmission and WIFI coverage, meet the need of PoE power supply for WIFI AP, IP-camera, WIFI Bridge, IP phones and other types of equipment. New generation of High-performance hardware and software platforms are used, providing flexible, cost-effective full Gigabit access and uplink ports, complete security mechanisms, improved ACL / QoS strategy and rich VLAN capabilities. It is easy to manage and maintain, meet the users' requirements for network equipment easy to manage, high security and low cost. Supporting Apollo Cloud One-stop Management Platform, realizing status checking and management monitoring functions, suitable for campus, Hotel and enterprise park network access, convergence, core Multi-application scenarios.

❖ Picture



❖ Features

■ Gigabit wire speed access, 10G uplink

- ◇ A combination of Gigabit Ethernet port and 10G uplink SFP+ port to meet the networking requirements 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

- ◇ 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.



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- ◇ IEEE 802.3af/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.

■ Security

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

■ Strong business processing capability

- ◇ 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.
- ◇ IGMP V1/V2 and IGMP Snooping.
- ◇ ERPS/STP/RSTP/MSTP.
- ◇ Static and dynamic aggregation.

■ Stable and reliable

- ◇ Low power consumption, fan active cooling, galvanized steel casing.
- ◇ 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.



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■ 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:

Model	BI848PGM4T-600W
Interface Characteristics	
Fixed Port	48*10/100/1000Base-T PoE ports (Data/Power) 4*1/10G uplink SFP+ slot ports (Data) 1 * console port(115200,N,8,1)
Ethernet Port	10/100/1000Base-T,Auto-sensing,Full/half duplex MDI/MDI-X self-adaption
SFP Slot Port	1/10G SFP+ optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)
Optical Cable	Multimode: 850nm 0 ~ 500M, single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.
Chip Parameter	
Network	L2+



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Management Type	
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-SR/LR IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	598Gbps
Forwarding Rate@64byte	131Mpps
MAC	32K
Buffer Memory	32M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (yellow), System : SYS (yellow), Network: Link/Act (yellow); SFP: L/A (green), PoE: PoE (green)
Reset Switch	Yes, One-button factory reset
PoE & Power	
PoE Port	Port 1 to port 48
PoE Management	Total power limit of PoE power supply PoE output power allocation, off& af &at PoE output priority configuration PoE working status Delay start of power supply Scheduling of PoE operation and time
Power Supply Pin	Default: 1/2 (+), 3/6 (-)



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Max Power Per Port	30W; IEEE802.3af/at
Total PWR / Input Voltage	600W (AC100-240V)
Power Consumption	Standby:<35W;Full load:<600W
Power Supply	Built-in power supply, AC100~240V 50-60Hz 6.6A
Power Input Interface	Dual input power interface, AC power supply priority, support anti-reverse protection, power-off automatic switching DC connection; 2 set DC12-48V input interfaces; way alarm switch interface; 1 set of AC power input interface
Physical Parameter	
Operation TEMP / Humidity	-40~+80°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	440*298*44.5mm
Net /Gross Weight	<5.0kg / <5.8kg
Installation	Desktop, 19 inch 1U cabinet
Certification & Warranty	
Lightning protection / protection level	Lightning protection: 6KV 8/20us; Protection level: IP30 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s



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	IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022):Class A IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS;
Warranty	5 years, lifelong maintenance.

Network Management Features

Interface	IEEE802.3X (Full-duplex) Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps. Port temperature protection setting Port green Ethernet Energy-saving setting
Layer 3 Features	L2+ Network management IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC



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	Voice VLAN, QinQ configuration Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 26 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS),Recovery time less than 20ms 255 Ring at most, Max 254 devices per ring.
Multicast	IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out MLD Snooping v1/v2,Multicast VLAN
Port Mirroring	Bidirectional data mirroring based on port
QoS	Diff-Serv QoS, Priority Mark/Remark 8*Output queues of each port 802.1p/DSCP priority mapping Queue Scheduling Algorithm (SP, WRR, SP+WRR) Flow-based Packet Filtering Flow-based Redirection Flow-based Rate Limiting
ACL	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. Port-based Issuing ACL. ACL based on port and VLAN
Security	User hierarchical management and password protection SSH 2.0,SSL,Port isolation, ARP message speed limit Broadcast storm control, Backup for host datum IEEE802.1X & MAC address authentication



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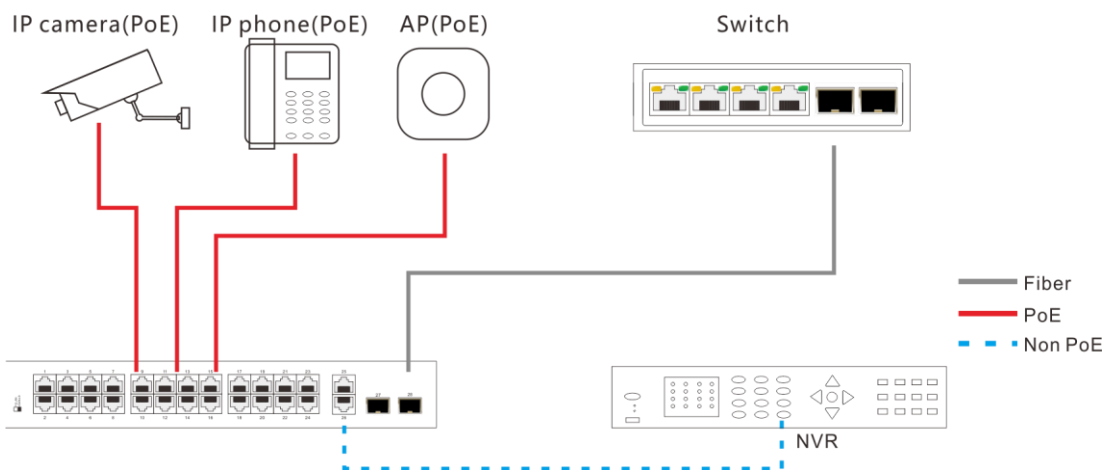
	Mac black holes, IP source protection AAA & RADIUS, MAC learning limit ARP inspection, Anti-DoS attack IP-MAC-VLAN-Port binding
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	Console/AUX Modem/Telnet/SSH2.0 CLI Web Management (HTTPS), Cable Diagnose, LLDP Download & Management on FTP, TFTP, Xmodem, SFTP SNMP V1/V2C/V3, One-key recovery NTP, System work log, Ping Test CPU instant utilization status view NMS - Smart Network Management System Platform (LLDP+SNMP)
System	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; Category 5 Ethernet network cable TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network



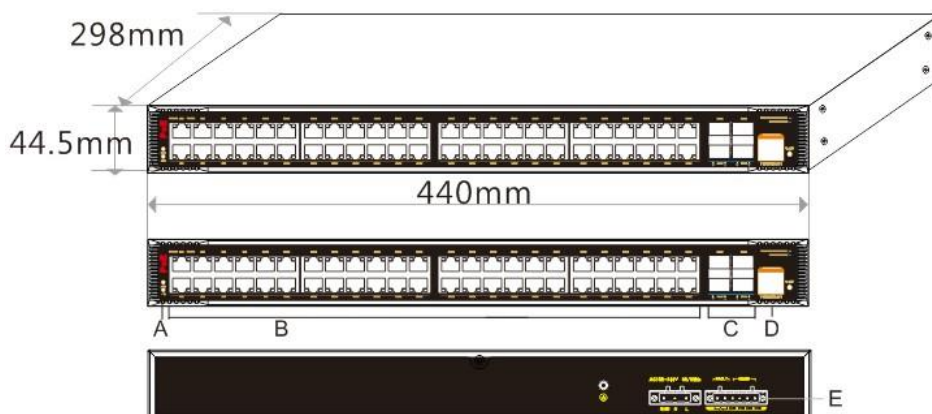
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❖ Application



❖ Dimensions:



A. Working indicator
C. 4*1/10G SFP+ ports
E. AC/DC input ports

B. 48* PoE ports
D. Console port



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❖ ORDERING INFORMATION:

Model	Description
BI8148PGM4T-600W	L2+ managed industrial PoE switch with 48* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Port 1-48 can support IEEE 802.3af/at PoE standard, Built-in 600W power supply. Support 1U/19 inch rack installation.

Note: Industrial PoE switch does not match SFP module.

PACKING LIST:

Packing List	CONTENT	QTY	UNIT
	52-port 10G uplink managed industrial PoE switch	1	SET
	AC Power Cable	1	PC
	RJ45-DB9 Line	1	PC
	Mounting Kits	1	SET
	User Guide	1	PC

BORN ELECTRONICS LIMITED

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WARRANTY:

3 YEARS (EXPANDABLE UPTO 5 YEARS)

WEBSITE: <http://bornelectronics.com/>