

# BC2108PGM8F-120W

## 16-port Full Gigabit Managed PoE Switch



### Ideal for:



Telecom



Hotels & Resorts



Universities



Healthcare



Public Places



Airport



Transport



Industries

## OVERVIEW

The BC2108PGM8F-120W is a full gigabit managed PoE fiber switch. It has 8\*10/100/1000Base-T RJ45 ports and 8\*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 120W. 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 a network cable to meet the network environment that needs high-density PoE power supply. It is suitable for hotels, campuses, parks, shopping malls, scenic spots, hospitals, factory dormitory and small and medium-sized enterprise.

The BC2108PGM8F-120W has L2+ full network management function, supports IPV4/IPV6 management, static route full line rate 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.

## FEATURES

### 1. Gigabit access, gigabit SFP port uplink

- All series supports "10/100/1000M RJ45 port + 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.

### 2. Intelligent PoE power supply

- 8\*10/100/1000Base-T RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- 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.

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### 3. 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.

### 4. Security

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

### 5. 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 can show the device status through the LED indicator of PWR, Link, PoE.

### 6. 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	BC2108PGM8F-120W
<b>Interface Characteristics</b>	
Fixed Port	8*10/100/1000Base-T PoE ports (Data/Power) 8*100/1000Base-X uplink SFP slot ports(Data) 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) 100BASE-TX: Cat5 or later UTP(≤100 meter) 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	Multi mode: 850nm 0 ~ 500M, single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.

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### Chip Parameter

Network Management Type	L2+
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	256Gbps (Non-blocking)
Forwarding Rate@64byte	23.81Mpps
MAC	8K
Buffer Memory	6M
Jumbo Frame	9.6K
LED Indicator	System: SYS (green), network: Link (yellow), POE: PoE (green), Fiber port: L/A(green)
Reset Switch	Yes, One-button factory reset

### PoE & Power Supply

PoE Port	Port 1 to 8 IEEE802.3af/at @ POE
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 (-)
Max Power Per Port	30W; IEEE802.3af/at
Total PWR / Input Voltage	120W/ (AC100-240V)
Power Consumption	Standby<15W, Full Load<120W
Power Supply	Built in power supply AC100~240V 50-60Hz 2.3A

### Physical Parameter

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)	270.5*181*44.5mm
Net /Gross Weight	<1.7kg / <2.2kg
Installation	Desktop, 19 inch 1U cabinet

### Certification & Warranty

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.

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### Network Management Features

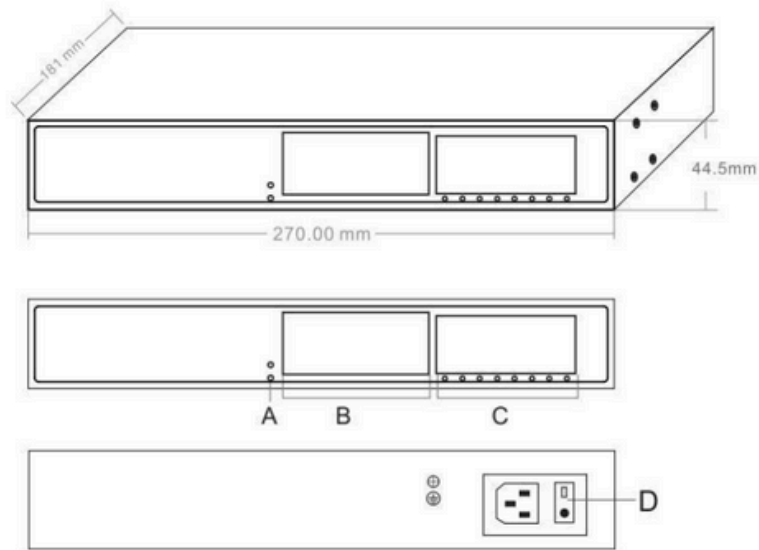
Interface	<ul style="list-style-type: none"> <li>IEEE802.3X (Full-duplex)</li> <li>Port temperature protection setting</li> <li>Port green Ethernet Energy-saving setting</li> <li>Broadcast storm control based on port speed</li> <li>The speed limit of the message flow in the access port.</li> <li>The minimum particle size is 64Kbps.</li> </ul>
Layer 3 Features	<ul style="list-style-type: none"> <li>L2+ network management</li> <li>IPV4/IPV6 management</li> <li>L3 software routing and forwarding Communication between different network segments and different VLANs</li> <li>Static route, Default route @ 128 pcs, APR @ 1024 pcs</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>4K VLAN based on port, IEEE802.1q</li> <li>VLAN based on the protocol</li> <li>VLAN based on MAC</li> <li>Voice VLAN, QinQ configuration</li> <li>Port configuration of Access, Trunk, Hybrid</li> </ul>
Port Aggregation	<ul style="list-style-type: none"> <li>LACP, Static aggregation</li> <li>Max 8 aggregation groups and 8 ports per group.</li> </ul>
Spanning Tree	<ul style="list-style-type: none"> <li>STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)</li> </ul>
Industrial Ring Network Protocol	<ul style="list-style-type: none"> <li>G.8032 (ERPS),Recovery time less than 20ms</li> <li>250 Ring at most, Max 1024 devices per ring.</li> </ul>
Multicast	<ul style="list-style-type: none"> <li>MLD Snooping v1/v2,Multicast VLAN</li> <li>IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out</li> </ul>
Port Mirroring	<ul style="list-style-type: none"> <li>Bidirectional data mirroring based on port</li> </ul>
QoS	<ul style="list-style-type: none"> <li>Flow-based Rate Limiting</li> <li>Flow-based Packet Filtering</li> <li>8*Output queues of each port</li> <li>802.1p/DSCP priority mapping</li> <li>Diff-Serv QoS, Priority Mark/Remark</li> <li>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</li> </ul>
ACL	<ul style="list-style-type: none"> <li>Port-based Issuing ACL,ACL based on port and VLAN 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.</li> </ul>
Security	<ul style="list-style-type: none"> <li>IP-MAC-VLAN-Port binding</li> <li>ARP inspection, Anti-DoS attack</li> <li>AAA &amp; RADIUS,MAC learning limit</li> <li>Mac black holes, IP source protection</li> <li>IEEE802.1X &amp; MAC address authentication</li> <li>Broadcast storm control, Backup for host datum</li> <li>SSH 2.0,SSL,Port isolation, ARP message speed limit</li> <li>User hierarchical management and password protection</li> </ul>
DHCP	<ul style="list-style-type: none"> <li>DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay</li> </ul>
Management	<ul style="list-style-type: none"> <li>One-key recovery</li> <li>Cable Diagnose,</li> <li>LLDP Web Management (HTTPS)</li> <li>NTP, System work log, Ping Test</li> <li>CPU instant utilization status view</li> <li>Console/AUX Modem/Telnet/SSH2.0 CLI</li> <li>Download &amp; Management on FTP, TFTP, Xmodem, SFTP,SNMP V1/V2C/V3</li> <li>NMS - smart network management system platform(LLDP+SNMP)</li> </ul>
System	<ul style="list-style-type: none"> <li>Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</li> </ul>

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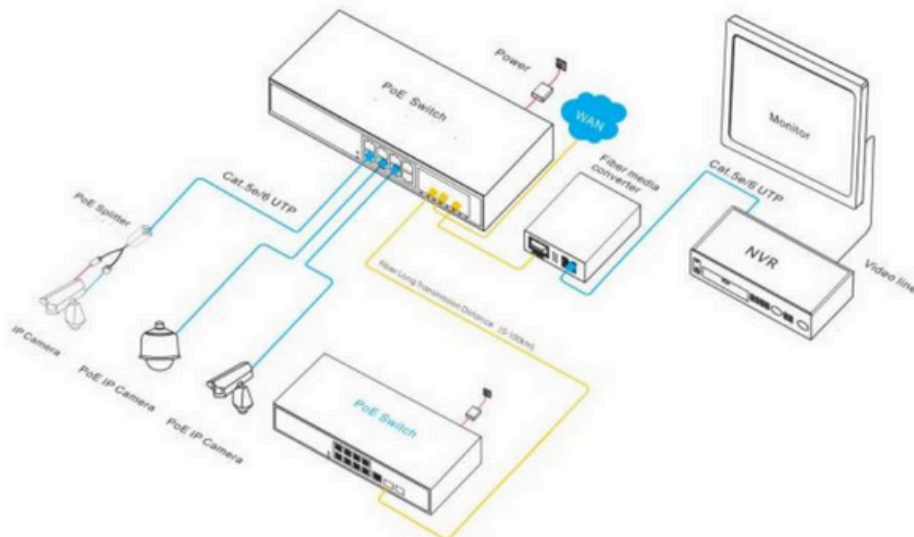


### DIMENSION



- A. Working Indicator
- B. 8\* 10/100/1000M PoE ports
- C. 8\*100/1000M SFP ports
- D. Power input port AC100- 240V,50/60Hz

### APPLICATION



# BC2108PGM8F-120W 16-port Full Gigabit Managed PoE Switch



## PACKING LIST

	Content	Qty	Unit
PACKING LIST	16-port full gigabit managed PoE switch	1	SET
	AC Power Cable	1	PC
	RJ45-DB9 Line	1	PC
	Mounting Kits(Hanging Ear)	1	PC
	User Guide	1	PC

**WARRANTY: 2 YEARS (EXPANDABLE UPTO 5 YEARS)**



# 337 Forest Road,  
London, United Kingdom



+44 7859 571344



[info@bornelectronics.com](mailto:info@bornelectronics.com)



<https://bornelectronics.com/>