

# BC2108GM8F

## 16-Port Full Gigabit Managed Ethernet Fiber Switch



### Ideal for:



Telecom



Hotels & Resorts



Universities



Healthcare



Public Places



Airport



Transport



Industries

## OVERVIEW

The BC2108GM8F is a full gigabit managed Ethernet fiber switch. It has 8\*10/100/1000Base-T RJ45 ports and 8\*100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding. The BC2108GM8F 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(<20ms) 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 port traffic control, VLAN division, and SNMP through the Web network management mode. It satisfies high-density network application environment and is suitable for medium, large-scale scenes such as hotel, campus, park, shopping mall, scenic spot, hospital, bank to form an economical, efficient and reliable communication network.

## FEATURES

### 1. Full Gigabit access, SFP fiber port uplink

- All series supports “Gigabit Ethernet port and Gigabit SFP fiber slot 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. 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.

### 3. Security

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

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#### 4. 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, SYS, Link, L/A.

#### 5. 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	BC2108GM8F
<b>Interface Characteristics</b>	
Fixed Port	8*10/100/1000Base-T RJ45 ports (Data) 8*100/1000Base-X SFP ports (Data) 1*Console RS232 port (115200,N,8,1)
Ethernet Port	Port 1-8 support 10/100/1000Base-T,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 not matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
SFP Port Expansion	Turbo overlocking 2.5G optical module and ring
Optical Cable	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 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
Forwarding Rate@64byte	23.81Mpps
MAC	8K
Buffer Memory	6M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (yellow), system: SYS(yellow), Network: Link (yellow), fiber port: L/A (green), speed: 1000M (green)
Reset Switch	yes, support one key to restore factory settings

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### Power

Total PWR / Input Voltage	30W/AC100-240V)
Power Consumption	Standby<8W, Full Load<18W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 0.65A

### 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*181*44.5mm
Net /Gross Weight	<1.2kg / <1.7kg
Installation	Desktop, wall mounted,19 inch 1U cabinet installation

### 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.

### Network Management Features

Interface	IEEE802.3X (Full-duplex) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
Layer 3 Features	L2+ network management ,IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	VLAN based on MAC VLAN based on the protocol Voice VLAN, QinQ configuration 4K VLAN based on port, IEEE802.1q Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 8 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 250 Ring at most, Max 250 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port

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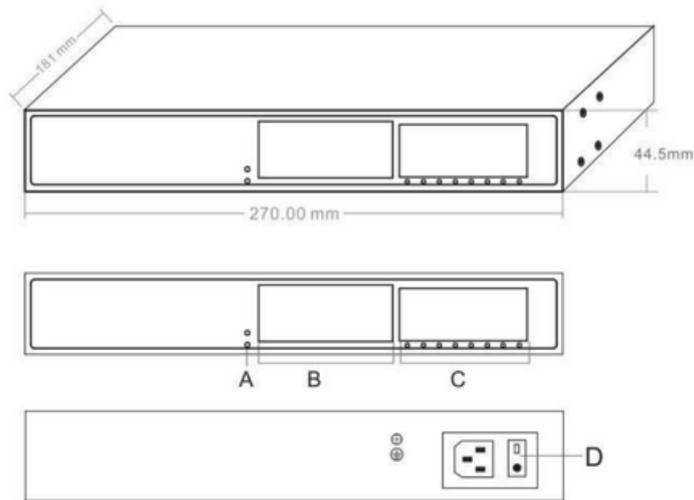
QoS	<ul style="list-style-type: none"> <li>Flow-based Rate Limiting</li> <li>Flow-based Packet Filtering</li> <li>8*Output queues of each port</li> <li>802.1p/DSCP priority mapping</li> <li>Diff-Serv QoS,Priority Mark/Remark</li> <li>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</li> </ul>
ACL	<ul style="list-style-type: none"> <li>Port-based Issuing ACL,ACL based on port and VLAN</li> <li>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,LLDP</li> <li>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</li> <li>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;</li> <li>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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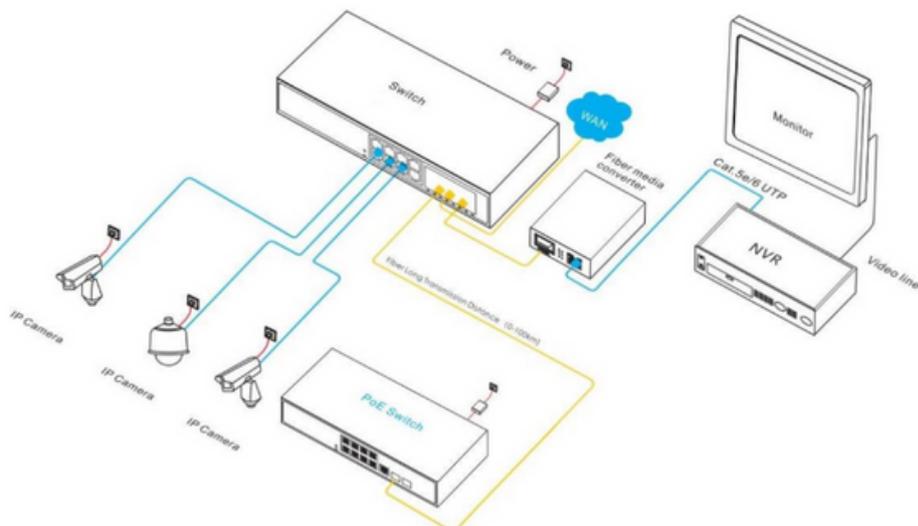


### DIMENSION



- A. Working Indicator
- B. 8\* 10/100/1000M RJ45 ports
- C. 8\*100/1000M SFP ports
- D. Power input port AC100- 240V,50/60Hz

### APPLICATION



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## 16-Port Full Gigabit Managed Ethernet Fiber Switch



### PACKING LIST

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



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