BC2148GM4F Series 52-port Full Gigabit Managed Ethernet Switch

BORN elegant creation

Ideal for:

- Telecom
- Hotels & Resorts
- Universities
- Healthcare
- Public Places
- Airport
- Transport
- Industries

OVERVIEW

The BC2148GM4F is a full gigabit L2+ managed Ethernet fiber switch. It has 48*10/100/1000Base-T RJ45 ports and 4*100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding. The BC2148GM4F has L2+ network management function, supports IPV4 management and static routing and forwarding, complete security protection mechanism, perfect ACL/QoS strategy and rich VLAN function, easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP (<50ms) to improve link backup and network reliability. When a one-way network fails, communication can be quickly restored to ensure uninterrupted communication for important transmissions. The switch supports flexible operation and maintenance management, and can be configured through various application services such as Web, CLI, SNMP, Telnet and other network management methods, port flow control, VLAN division, QoS and other functions. It can meet the multi-channel video surveillance and wireless coverage network application environment. Suitable for hotels, campuses, parks, supermarkets, scenic spots, factory dormitories and SMB small and medium-sized enterprises to form a cost-effective network.

FEATURES

1. Gigabit access, Gigabit SFP fiber port 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 Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

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

3. Strong business processing capability
- STP/RSTP/MSTP.
- Static and dynamic aggregation.
- IGMP V1/V2 and IGMP Snooping.
- Support IEEE 802.1Q VLAN, protocol VLAN, users can flexibly divide VLAN according to their needs.
- 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.

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4. Stable and reliable
- CCC, CE, FCC, RoHS.
- Low power consumption, galvanized steel casing, no fan.
- Self-developed power supply, high redundancy design, providing a long term and stable power output.
- The user-friendly panel can show the device status through the LED indicator of PWR, Link.

5. 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

Model	BC2148GM4F
Interface Characteristics	
Fixed Port	48*10/100/1000Base-T RJ45 ports (Data) 4*100/1000Base-X uplink SFP slot ports (Data) 1*RS232 console port(115200,N,8,1)
Ethernet Port	Port 1-48 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 include optical modules (optional 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.
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	368Gbps (Non-blocking)
Forwarding Rate@64byte	77.38Mpps
CPU	750MHz
DRAM	1G
FLASH	256M
MAC	16K
Buffer Memory	12M
Jumbo Frame	10K
LED Indicator	Power: PWR (Yellow), System: SYS (Yellow), Network: Link/Act (Yellow), Fiber port: L/A(Green)
Reset Switch	Yes, One-button factory reset

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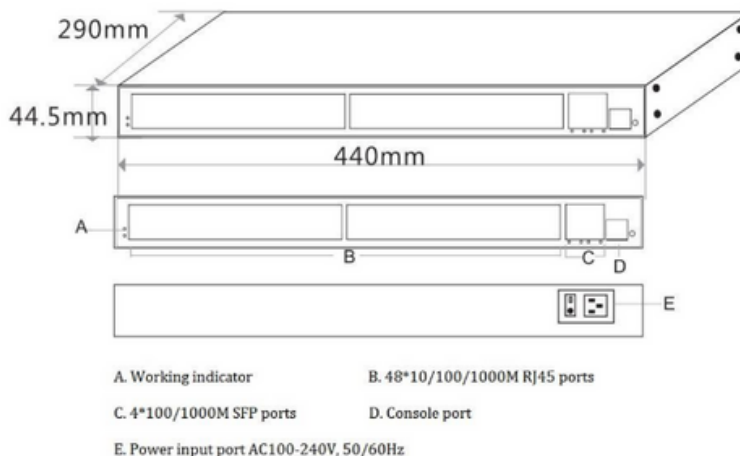# 52-port Full Gigabit Managed Ethernet Switch

Power Supply	
Total PWR / Input Voltage	60W/ (AC100-240V)
Power Consumption	Standby<35W, Full load<55W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1.0A

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)	440*290*44.5mm
Net /Gross Weight	<4.4kg / <5.0kg
Installation	Desktop, wall-mounted,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 EN62368-1, 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	IPV4 static route/default route, maximum 128 entries L2+ network management, ARP protocol, maximum 1024 entries
VLAN	VLAN based on the protocol, 4K VLAN based on port, IEEE802.1q VLAN based on MAC, 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)
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
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)

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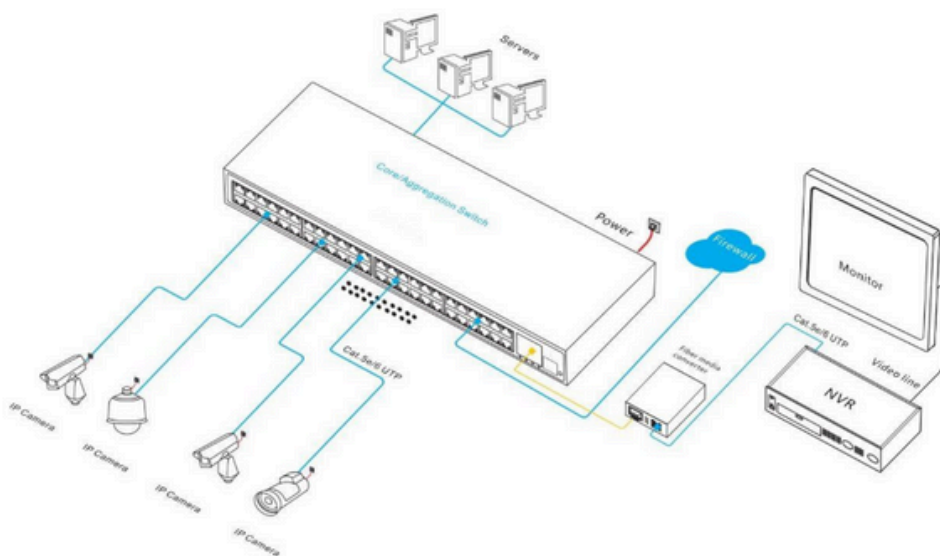|	
ACL	Port-based Issuing ACL,ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding ARP inspection, Anti-DoS attack AAA & RADIUS,MAC learning limit Mac black holes, IP source protection IEEE802.1X & MAC address authentication Broadcast storm control, Backup for host datum SSH 2.0,SSL,Port isolation, ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	One-key recovery Cable Diagnose, LLDP Web Management (HTTPS) NTP, System work log, Ping Test CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI Download & Management on FTP, TFTP, Xmodem, SFTP,SNMP V1/V2C/V3 NMS - smart network management system platform(LLDP+SNMP)
System	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

DIMENSION

290mm
44.5mm
440mm

A. Working indicator   B. 48*10/100/1000M RJ45 ports

C. 4*100/1000M SFP ports   D. Console port

E. Power input port AC100-240V, 50/60Hz

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APPLICATION

PACKING LIST

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