

Datasheet | BI8304B4PGM2FT

Industrial 4 - Port Gigabit PoE ++ 4 - Port Gigabit PoE + 2 - Port 10G SFP + 2 - Port 1G / 2.5G SFP L2 Managed Ethernet Switch



Overview

BI8304B4PGM2FT is Industrial 4-Port Gigabit PoE++ 4-Port Gigabit PoE+ 2-Port 10G SFP+ 2-Port 1G/2.5G SFP L2 Managed Ethernet Switch.

This switch provides 8 Gigabit Ethernet RJ-45 ports, 2*10G SFP+ ports and 2*1G/2.5G SFP ports. It meets IEEE 802.3af/at/bt standard. All RJ-45 ports support Power-over-Ethernet, 1~4 ports deliver up to 90W(PoE++) power per port, 5~8 ports deliver up to 30W(PoE+) power per port. It supports PoE watchdog features, which can detect and restart the camera automatically if it's frozen. The switch supports the Q-PoE (Quick PoE) technology, which enables PoE power supply immediately upon switch startup without waiting for switch system software control. The switch supports the P-PoE (Perpetual PoE) technology, which enables PoE power supply without interruption when switch is restarting and restores network quickly.

The switch has extensive L2 management functions, such as 802.1Q VLAN, 802.1p QoS, SNMP, Fast-Ring, ERPS and PoE control. It can be easily managed via a WEB GUI (http/https), CLI (telnet/ssh/console) or SNMP.

Features and Highlights

Abundant Interfaces

- 4*10/100/1000Base-T PoE++ RJ-45 ports
- 4*10/100/1000Base-T PoE+ RJ-45 ports
- 2*1G/2.5G or 10GBase-X SFP+ ports
- 2*1G/2.5GBase-X SFP ports
- 1*RJ-45 Console port
- 1*USB 3.0 port
- 1*RS485

Industrial Design

- Working temperature:-40~75°C
- Redundant power supply
- 6kV contact discharge, 8kV air discharge ESD
- Fan-less metal shell design
- DIN-rail/wall mounted/desktop installation



Layer 2 Management Function

- 802.1Q VLAN
- 802.1p QoS
- SNMP
- STP/RSTP/MSTP
- Fast-Ring
- ERPS
- IGMP snooping
- DMS (Dashboard management system)

Software Architecture

Item			
Reliability		Alarm Management	
Rapid spanning tree	• Enable and Disable	Alarm Host	• Enable and Disable
	• STP Version		• Alarm Type
	• Device Priority		• Power Supply
	• Message Sending Period		• Port Network
	• Message Maximum Lifetime		• Port PoE
	• Port State Transition Delay		
	• This Bridge Update Message	DMS	
	• Modify Configuration	Device List	• Enable and Disable
MSTP Region Configuration	• Enable and Disable	• Type in List	
	• Region name	Topology View	• Topology View
	• Version	System Management	
	• Hello Time	Port Mirroring	• Enable and Disable
	• Max.Age		• Monitor Port
	• Forward Delay		• Mirror Port Range
• Max. Hops	• Collect Data		
MSTP instance configuration	• Instance ID	SNMP	• Enable and Disable
	• Corresponding VLANs		• SNMP Gateway
	• Priority		• SNMP Version
	• Path Cost		• Read-only Group Name
MSTP Port Configuration	• Port Priority		• Read and Write Group Name
	• Point-to-point		• SNMP V3 setting
	• Admin Edge	Telnet	• Enable and Disable
	• Auto Edge	HTTP	• HTTP and HTTPS
	• Restrict Role	Time	• Time Setting
	• Restrict TCN		• World Time Zone
	• BPDU Filter		• NTP Server
	• BPDU Guard		• System Time
	• Root Guard	• PC Time	
	• Port Range	Syslog	• Enable and Disable
• Instance ID	• Show Type		
• MSTP Bridge Information	• Information Processing		
FastRing Protect	• MSTP instance information	Management	• Restore Factory Value
	• Enable and Disable		• System Reboot
	• Fast Ring Network Group 1		• Download Configuration File
Loopback Protect	• Fast Ring Network Group 2		• Upload Configuration File
	• Enable and Disable		• Choose upgrade file
	• Protect Automatic Recovery	User Setting	• Access Privilege
	• Disable Loop Port Time		• Username
• Port Range	• Input password		
• Port Loop Detection	• Confirm password		
ERPS Ring	• Ring Number	Timing Restart	• Password type
	• East Interface		• Every day
	• West Interface		• Every week
ERPS Instance	• Enable and Disable		Manage IP Address
	• Name	• Access	
	• ID	• Manage VLAN	
	• Ring Number	• IP Addr	
	• Level	• Subnet mask	
	• RAPS VLAN	• Default gateway	
	• Owner Interface	• DNS address	
	• Subring Blocking	• IPv6 address	
	• Associated Instance	• IPv6 default gateway	
Network Diagnosis		One Key Smart	• CCTV Mode
ICMPv4	• Ping IPv4		• Device Lock
ICMPv6	• Ping IPv6		• Fast Ring
Traceroute	• Destination IP		• Device Online

Software Architecture

Item			
System State		Ethernet Switch	
System Status	• Device Name	Link Aggregation	• Aggregated Load Pattern
	• MAC Address		• Trunk Name
	• Firmware Version		• Aggregation Pattern
	• Hardware Version		• Port Range
	• System Time	802.1Q VLAN	• Port Range
	• Update Time		• Link Type
Traffic Statistics	• Port No		• PVID
	• Sent Frame Statistics		• vlan-allowed
	• Received Frame Statistics		• vlan-untagged
MAC Address Table	• Sort Type	802.1p QoS	• Enable and Disable
	• MAC Address		• QoS Scheduling
	• VLAN ID		• Priority
	• Port	DSCP QoS	• Enable and Disable
Address Type	• Address Type		• DSCP Mark Range
			• DSCP Priority
Port Configuration		WRR Configuration	• bandwidth weights
Port Setting	• Port State	IP Service	
	• Port Speed	DHCP Server	• Enable and Disable
	• Duplex Mode		• Client Lease Time
	• Flow Control		• DNS Address
	• Port Range		• WINS Server
Rate Limit	• Enable and Disable		• Pool Name
	• Port Range		• Network Interface(VID)
	• Input Speed Limit		• Gateway/Subnet
Storm Control	• Output Speed Limit		• Start IP Address
	• Port Range		• Max Client Number
	• Broadcast Storm	IP Multicast	
	• Multicast Storm	IGMP Snooping	• IGMP Interception Setting
Port Isolation	• Unknown Unicast Storm		• IGMP Query
	• Port Range		• Static multicast MAC address
LLDP Configuration	• Port Isolation		• VLAN ID
	• Enable and Disable		• Port Range
	• Holdtime	Security Configuration	
	• Interval Time	802.1X Authentication	• Global Setting
LLDP Neighbors	• Admin Status		• Timing Update Authentication
	• Port Range		• Radius Server Setting
	• total entries displayed		• Server Port Setting
	• Device		• Port Setting
	• Mac Address		• Port Range
	• IPv4 Address	Local Radius Setting	• User login
	• Local-port		• User password
Mac Limit	• Holdtime	AAA	• Radius user settings
	• Port-ID		• Authentication login
	• Capability	Static Address Lock	• Enable and Disable
	• Enable and Disable		• MAC Address
PoE Setting	• Port Range		• VLAN ID
	• Mac Limit Num	MAC Dynamic Aging	• Port
	• Power setting		• Aging Time
	• Power status		
	• Port status and control		

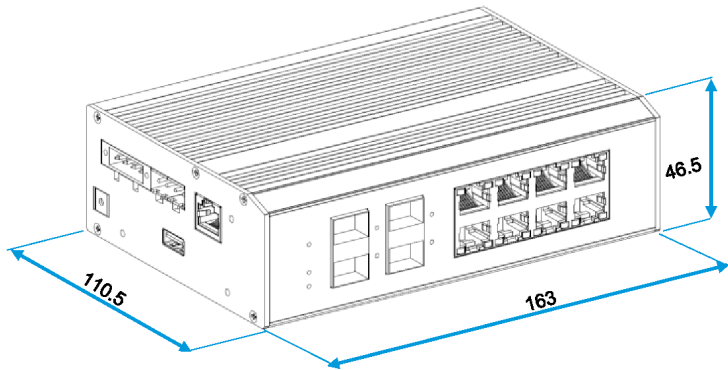
Specifications

Item	BI8304B4PGM2FT
Hardware Specifications	
Ethernet Ports	4*10/100/1000Base-T PoE++ RJ-45 4*10/100/1000Base-T PoE+ RJ-45 2*1G/2.5G or 10GBase-X SFP+ 2*1G/2.5GBase-X SFP
Management Ports	1*RJ-45 Console 1*Relay
Serial Port	1*RS-485 RS-485 signal: D+, D- Check bit: None, Even, Odd, Space, Mark Data bit: 5, 6, 7, 8bit Stop bit: 1, 1.5, 2bit Baud rate: 300~115200bps Load capacity: RS-485 port supports 32-point polling environment(128-point could be customized) Direction control: RS-485 adopts automatic data flow control technology
USB Port	USB3.0
Init Button	Short press to restart the switch, long press >5s to initialise the system
LED Indicators	2*Power supply indicators, 1*Alarm indicator, 2*SFP+ port indicators, 2*SFP port indicators
Cable	Cat5 or better
Dimensions (W*D*H)	163mm*110.5mm*46.5mm
Net Weight	0.82kg
Input Voltage	Support redundant power supply, Power 1 (Main): 48~57V DC, Power 2 (Backup): 48~57V DC
Power Consumption	≤370W(Full load, include PoE)
Installation	DIN-rail/Desktop/Wall mounted
Material	Metal shell
Switch Property	
Forwarding Modes	Store and Forward
Switching Capacity	66Gbps/non-blocking
Packet Forwarding Rate	49.1Mpps
MAC Table	16k, supported auto learning
Port Buffer	1Mbit
Jumbo Frame	9kB
PoE	
PoE Power Supply Type	End-span
PoE Standard	IEEE 802.3af/at/bt
PoE Pin Assignment	1~4 ports: 3/6/4/5(+), 1/2/7/8(-); 5~8 ports: 1/2(+), 3/6(-)
PoE Budget	1~4 ports: 90W max for each port, 5~8 ports: 30W max for each port, 360W max for whole switch
Environments	
Surge protection	IEC61000-4-5, Power: 4kV, Data Port: 6kV
ESD	IEC61000-4-2, Level 3: Contact Discharge: 6kV, Air Discharge: 8kV
Operating	Temperature: -40°C~75°C
	Relative Humidity: 5%~95% (Non-condensation)
Storage	Temperature: -40°C~85°C
	Relative Humidity: 5%~95% (Non-condensation)

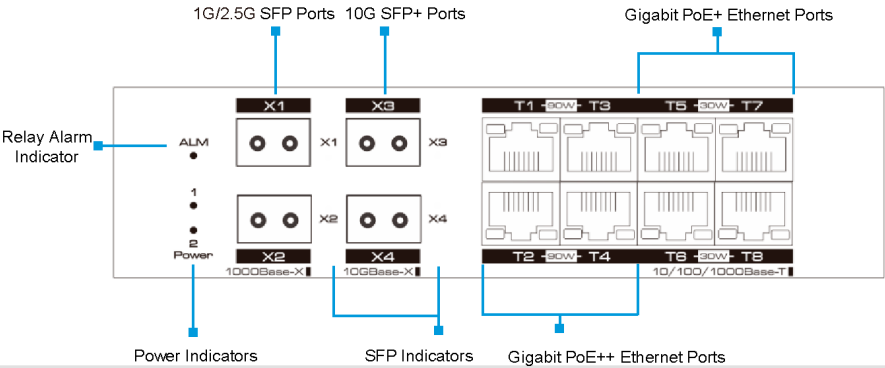
Appearances and Dimensions

BI8304B4PGM2FT

Dimensions (mm)



Front Panel



Side Panel

