



24-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4 Gigabit Combo



BI8224PGM4GCF-500W

Key Features:

Ports: Provide 24*10/100/1000Mbps PoE ports with 4 Gigabit RJ45 and 4-1.25G SFP Combo

PoE Standard: IEEE802.3af/at Power over Ethernet (PoE) Compliant

Self-adaption: RJ45 port supports 10/100/1000Mbps Auto MDI/MDIX

Industrial Installation: Rack mounting installation

Wide Application: Designed for Railway, traffic etc some Industrial environment

Surge protection: Protect the device from lightning surges and others electrical hazards

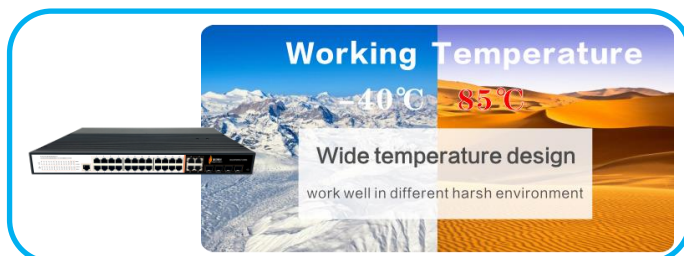
Managed: Support remote web managed,VLAN and storm control and IPV6 management etc.

Working Temperature: -40 to 85 degrees operating temperature

Considerate Design: IP40 Industrial design with dual power input

Environmentally Hardened Design

With the **IP40** metal industrial case which provides a high level of immunity against electromagnetic interference and heavy electrical surges,Being able to operate under the temperature range from **-40 to 85 degrees C**, the BI8224PGM4GCF-500WS can be placed in almost any difficult environment.



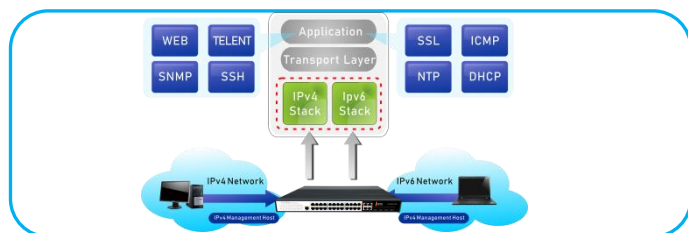
Cost-effective IPv6 Managed Gigabit PoE Switch Solution

With layer 2+ managed Gigabit PoE Switch, It provides IPv6/IPv4 management and built-in L2/L4 Gigabit Switching engine, and supports high-speed transmission of surveillance images and videos.



Surge Protection Design

provides contact discharge of $\pm 8\text{KV}$ DC and air discharge of $\pm 16\text{KV}$ DC for Ethernet ESD protection. It also supports $\pm 6\text{KV}$ surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.



Robust Layer 2 Features

The BI8224PGM4GCF-500WS can be programmed for advanced switch management functions, such as dynamic port link aggregation, Multiple Spanning Tree Protocol (MSTP), Layer 2/4 QoS, bandwidth control and IGMP/MLD snooping.



BI8224PGM4GCF-500WS

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Technical Datasheet

Model	BI8224PGM4GCF-500WS	
Hardware Specifications		
Connector	24* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	4* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	4* 1000 Base-X SFP Slots Combo	
Console	1 Console port	
LED Display	Power Indicator: PWR(green).Network Indicator: Link(yellow)	
Thermal Fan	Fanless Design	
Installation	Rack Mounting	
Switch Architecture	Store and Forward	
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex	
Switch Performance	Backplane bandwidth	128Gbps
	Packet forwarding rate	47.62Mpps
	MAC address	16k
Power requirement	AC100-260V	
Dimension(WxDxH)	440mm x 290mm x 44.5mm(17.32in x 11.42in x1.75in)	
Weight	<5kg	
Power over Ethernet (PoE) Specifications		
PoE Standard	IEEE 802.3af Power over Ethernet/PSE	
	IEEE 802.3at Power over Ethernet Plus/PSE	
PoE Supply Type	1/2(+), 3/6(-) End-span	
PoE Power Output	Per Port 52V DC, 300mA. max. 15.4 watts (IEEE 802.3af)	
	Per Port 52V DC, 600mA. max. 30 watts (IEEE 802.3at)	
PoE Power budget	500W optional	
Standards Conformance		
Network standard	IEEE802.3i 10 BASE-T	
	IEEE802.3u 100 BASE-TX	
	IEEE802.3ab 1000BASE-T	
	IEEE802.3x Flow Control	
	IEEE802.3az EEE	
Stability Testing	FCC CFR47 Part 15, EN55022/CISPR22, Class A	
	EMS:	
	IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)	
	IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)	
	IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV	
	IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV	
	IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)	
	IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)	
	IEC 60068-2-32 (free fall)	
	IEC 60068-2-27 (shock)	
	IEC 60068-2-6 (vibration)	

Layer 2 Functions

Port Mirroring	TX / RX / both Many-to-1 monitor
Vlan	802.1Q tagged-based VLAN Up to 256 VLAN groups, out of 4094 VLAN IDs 802.1ad Q-in-Q tunneling Voice VLAN;Protocol VLAN;Private VLAN (Protected port),GVRP
Link Aggregation	IEEE 802.3ad LACP and static trunk Supports 8 groups of 8-port trunk
Spanning Tree Protocol	STP, IEEE 802.1D Spanning Tree Protocol RSTP, IEEE 802.1w Rapid Spanning Tree Protocol MSTP, IEEE 802.1s Multiple Spanning Tree Protocol
IGMP Snooping	IGMP (v2/v3) snooping IGMP querier Up to 256 multicast groups
MLD Snooping	MLD (v1/v2) snooping, up to 256 multicast groups
Access Control List	IPv4/IPv6 IP-based ACL / MAC-based ACL 8 mapping ID to 8 level priority queues --- Port number
QoS	--- 802.1p priority --- 802.1Q VLAN tag --- DSCP field in IP packet Traffic classification based, strict priority and WRR
PoE Management	Open or close port Standard POE scheduling management Power and current display Automatic restarting function of equipment dead machine Timing Support IP bindings restarting
Security	IEEE 802.1X port-based authentication Built-in RADIUS client to co-operate with RADIUS server RADIUS / TACACS+ user access authentication IP-MAC port binding MAC filtering Static MAC address DHCP Snooping and DHCP Option82 STP BPDU guard, BPDU filtering and BPDU forwarding DoS attack prevention ARP inspection IP source guard

Management Function

Basic Management Interfaces	Web browser / Telnet / SNMP v1, v2c, V3 Firmware upgrade by HTTP / TFTP protocol through Ethernet network Remote / Local Syslog, System log, LLDP protocol, SNMP
Secure Management Interfaces	SSH, SSL, SNMP
SNMP MIBs	RFC 1213 MIB-II RFC 1215 Generic Traps RFC 1493 Bridge MIB RFC 2674 Bridge MIB Extensions RFC 2737 Entity MIB (Version 2)

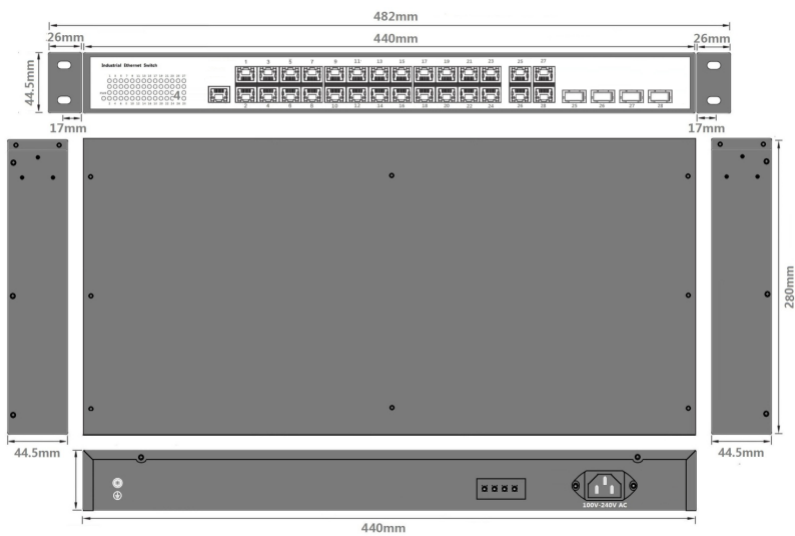
RFC 2819 RMON (1, 2, 3, 9)
RFC 2863 Interface Group MIB
RFC 3635 Ethernet-like MIB

Environment

Safety FCC Part15 Class A,CE,RoHs

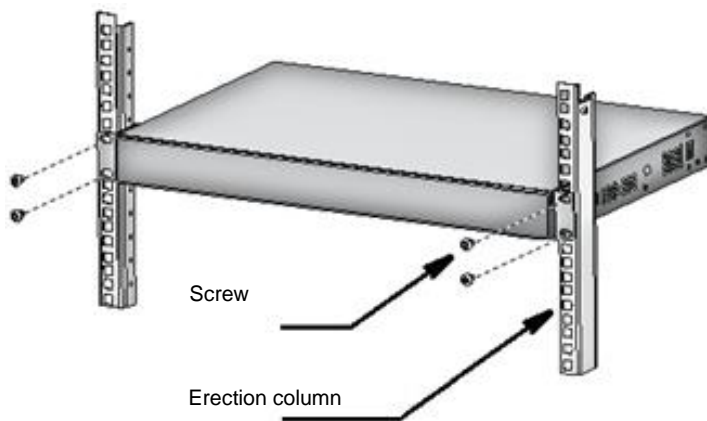
Environment specification
Operating temperature: -40°C~85°C , operating humidity: 5%~95%
Storage temperature: -40°C~85°C , storage humidity: 5%~95%

Mechanical Drawing



Installation Models

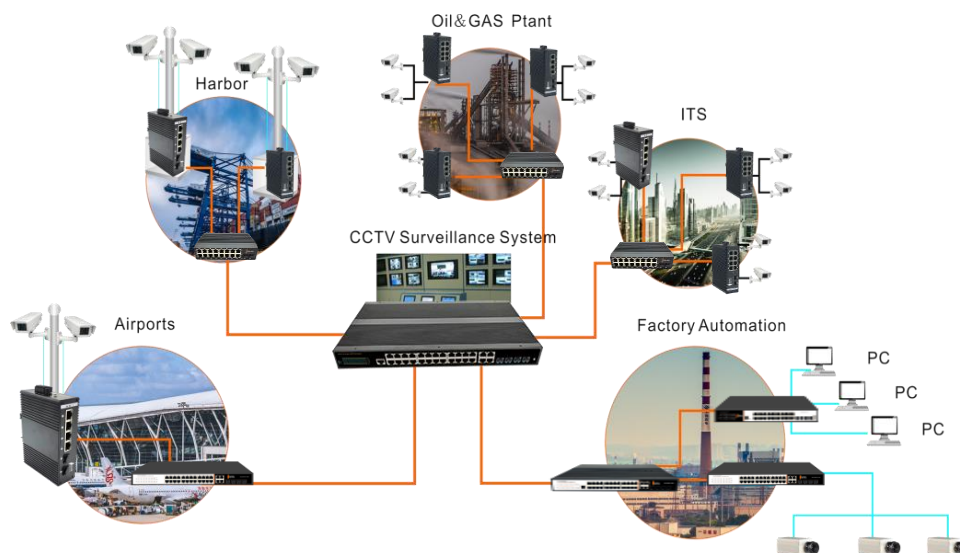
Rack Mounting



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Applications



Ordering Information

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24 Ports 10/100/1000Mbps Industrial Managed PoE switch With 4 Gigabit RJ45 and 4 Gigabit SFP Combo