BORN
elegant creation

BI8224PGM2F

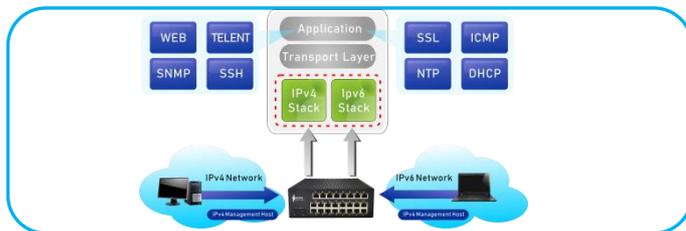## 26-Port Gigabit Industrial L2 Managed PoE Switch

Datasheet

Key Features:

Ports: Provide 24*10/100/1000Mbps PoE ports with 2*1000Mbps SFP

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

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

Industrial Installation: Din Rail mounting installation

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

Surge protection: Protect the device from lighting 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 BI8224PGM2F can be placed in almost any difficult environment.

Surge Protection Design

provides contact discharge of ±8KV DC and air discharge of ±15KV DC for Ethernet ESD protection. It also supports ±6KV surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.
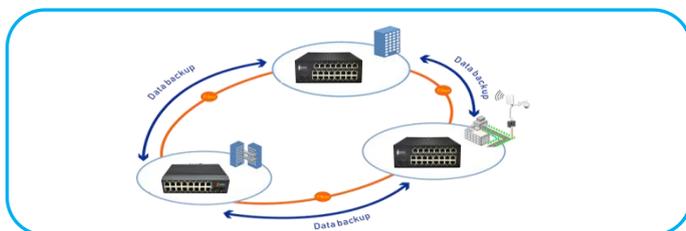
Cost-effective IPv6 Managed Gigabit PoE Switch Solution

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.

Comprehensive reliability mechanisms(ERPS)

Besides STP,RSTP, and MSTP, the BI8224PGM2F Managed PoE Switch supports enhanced Ethernet reliability technologies such as Ethernet Ring Protection Switching (ERPS), also referred to as G.8032. ERPS supports various services and allows flexible networking, helping customers build a network with lower OPEX and CAPEX.

24-Port 10/100/1000Mbps Industrial Din rail Managed PoE Switch with 2 SFP

Technical Datasheet

Model	BI8224PGM2F	
Hardware Specifications		
Connector	24* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	2* 1.25GBase-X SFP Slots 1 Console port	
PoE Port	24* 10/100/1000Mbps POE PSE port	
LED Display	Power Indicator: PWR(green).Network Indicator: Link(yellow)	
	PoE Working Indicator: PoE(green)	
Thermal Fan	Fanless Design	
Installation	Din Rail	
Switch Architecture	Store and Forward	
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex	
Switch Performance	Backplane bandwidth	56Gbps
	Packet forwarding rate	42Mpps
	MAC address	8k
Power requirement	DC 44V~54V	
ESD Protection	6KV ESD	
Dimension(W×D×H)	80mm x135mm x 180mm(3.15in x 5.3in x 7.9in)	
Weight	1.8kg	
Power over Ethernet (PoE) Specifications		
Network standard	IEEE802.3i 10 BASE-T	
	IEEE802.3u 100 BASE-TX	
	IEEE802.3ab 1000BASE-T	
	IEEE802.3x Flow Control	
	IEEE802.3af Power over Ethernet	
	IEEE802.3at Power over Ethernet	
	IEEE802.3az EEE	
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	240/480W optional	
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	

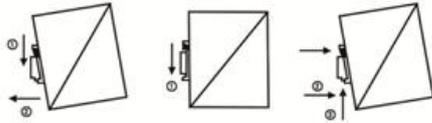|	
Industrial Ring	MSTP, IEEE 802.1s Multiple Spanning Tree Protocol
	G.8032 (ERPS),Recovery time less than 20ms
	250 Ring at most, Max 1024 devices per ring
IGMP Snooping	IGMP (v2/v3) snooping
	IGMP querier
	Up to 256 multicast groups
MLD Snooping	MLD (v1/v2) snooping, up to 256 multicast groups
Access Control List	IPv4/IPv6 IP-based ACL / MAC-based ACL
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
QoS	8 mapping ID to 8 level priority queues
	--- Port number
	--- 802.1p priority
	--- 802.1Q VLAN tag
	--- DSCP field in IP packet
	Traffic classification based, strict priority and WRR
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 ,SNTP
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℃~85℃，operating humidity: 5％~95％
	Storage temperature: -40℃~85℃，storage humidity: 5％~95％

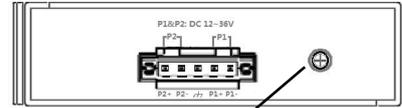## Installation Models

Power Terminal
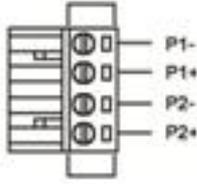
- 4-pin 3.81mm-spacing plug-in terminal
- 48V-56VDC wide voltage input
- P1&P2 dual power input
- Reverse protection
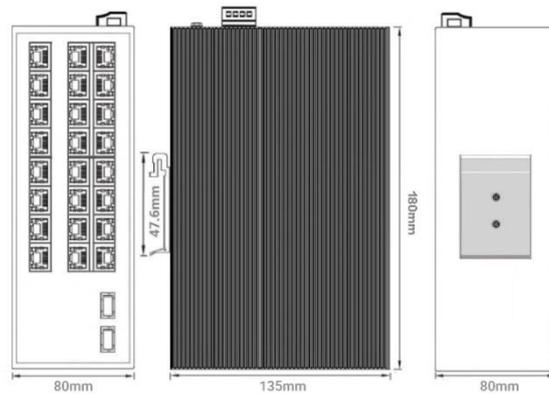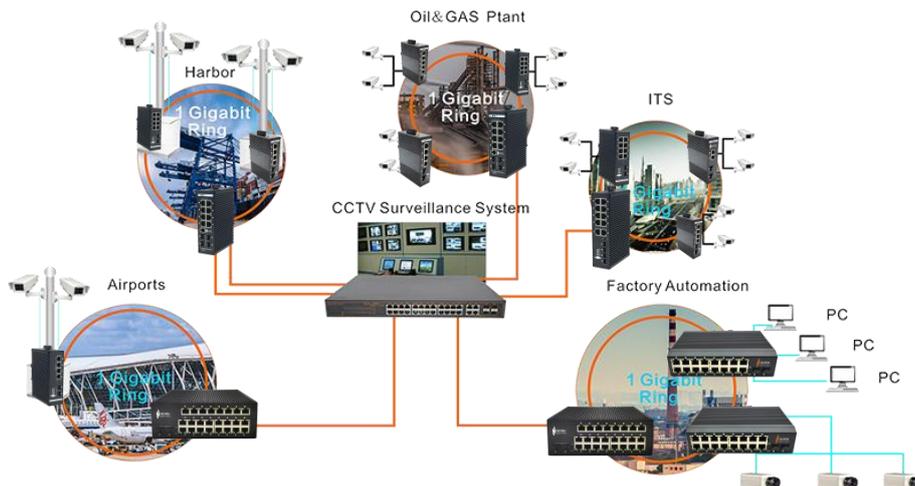
P1-
P1+
P2-
P2+

Earth Protection

P1&P2: DC 12~36V

Ground terminal or screw

Din-Rail

Mechanical Drawing

47.6mm
180mm
80mm
135mm
80mm

Applications

Oil & GAS Plant
1 Gigabit Ring
ITS
Harbor
1 Gigabit Ring
CCTV Surveillance System
Gigabit Ring
Airports
1 Gigabit Ring
Factory Automation
1 Gigabit Ring
PC
PC
PC

Ordering Information	
BI8224PGM2F	24 Ports 10/100/1000Mbps Industrial Managed PoE switch With 2 SFP Uplink.Din rail, IEEE802.3af/at,Din rail