



# 16 ports Industrial Full Gigabit Layer-3 Managed Switch BI912PGM4F series

## ❖ Overview

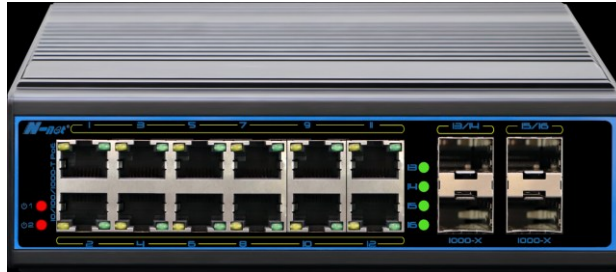
BI912PGM4F is a 16-port full gigabit industrial managed PoE switch that supports up to 12\*10/100/1000M PoE downlink ports, 4\* 1000M SFP ports. 12\*10/100/1000M ports support PoE+, conforming to IEEE 802.3af/at standard, PoE power each port up to 30W.

It supports L3 management, such as OSPF, RIP, QoS, VLAN, MSTP, Multi-broadcast, ports management and PoE management.

It supports 6KV surge protection, 8KV contact/15KV air ESD protection.

It supports wall hanging, desktop and Din-rail installation, reliable and durable, and can be used in security network video monitoring, network engineering and other occasions.

## ❖ Pictures



## ❖ Features

- ❖ With 12\*10/100/1000M PoE downlink ports, 4\*1000M SFP ports;
- ❖ Support PoE power each up to 30W;
- ❖ Support L3 management, such as OSPF, RIP, QoS, VLAN, MSTP, Multi-broadcast, ports management and PoE management;
- ❖ 6KV surge protection, 8KV contact /15KV air ESD protection;
- ❖ Support working temperature -40°C ~75°C.



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## ❖ Specifications

Parameter	Specifications
Power supply	Powered by power adaptor
Range of voltage	2*DC 48~57V, redundancy power supply
Consumption	Self-consumption<20W
Downlink ports	10/100/1000Base-T 30W PoE RJ45(IEEE 802.3af/at)
Uplink ports	Ports 13~16 1000M SFP slots
Cable and distance	Use cat5e/6,100m max
Standard	IEEE802.3, IEEE802.3u, IEEE802.3z
Switch fabric	32Gbps
Though put	23.8Mpps
Buffer	4M
MAC address table	16K
Indicator	Power: 2 *red ;
Protection	Surge: 6KV, standard: IEC61000-4-5
Working temperature	-40°C~75°C
Storage temperature	-40°C~85°C
Humidity	0~95%(No condensation)
Dimension(L×W×H)	165 mm×114 mm×46mm
Material	Metal
Color	Black
Net-weight	530g

### Software:

L2 Features	Port configuration	Auto-negotiation
		Flow Control
		Port Mirror
		Traffic statistics
	Link Aggregation	Static link aggregation
		LACP
		Algorithm based on Source/Destination MAC
		Algorithm based on Source/Destination IP
		8 groups
		8 ports per group



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L2 Features	MAC Table	Aging Time	
		Static MAC address	
		Dynamic MAC address management	
	VLAN	4K Active VLANs	
		4K VID	
		802.1Q Tag VLAN	
		Port VLAN	
		Protocol VLAN	
		MAC VLAN	
		Management VLAN	
		Voice VLAN	
		Q-in-Q	
		Private VLAN	
		GARP/GVRP	
		ACL	64 ACLs
			L2, L3 e L4
	Time-based ACL		
	Spanning tree	802.1D Spanning Tree Protocol (STP)	
		802.1w Rapid Spanning Tree Protocol (RSTP)	
		802.1s Multiple Spanning Tree Protocol (MSTP)	
		Loop Guard	
		Root Guard	
		TC-BPDU Guard	
		BPDU Guard	
		BPDU Filter	
	Multicast	256 groups	
		IGMP v1/v2/v3	
Fast Leave			
Multicast VLAN			
Static Multicast			
Multicast Filter			
IGMP Statistics			
MLD Snooping			



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L2 Features	PoE management	Support total power consumption control
		Support single port PoE ON/OFF
		Support port output priority
	QOS	4 priority queues
		CoS port-based
		CoS 802.1p-based
		CoS DSCP-based
		Scheduling algorithms SP, WRR, SP+WRR
		Storm Control (Broadcast, Multicast, Unknown Unicast)
Bandwidth control per port		
Security Features	Port Security	
	MAC address filter	
	ARP Association (Manual, ARP scanning, DHCP snooping) up to 200 entries	
	ARP Protection	
	DoS (Denial of Service)	
	Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type	
	802.1x Authentication (port-based e MAC-based)	
	TACACS/TACACS+ Authentication	
	RADIUS Authentication	
	DHCP Filter	
	Guest VLAN	
	SSLv2/SSLv3/TLSv1	
	SSHv1/SSHv2	
	Restriction of WEB access based on: IP Address, And. MAC and Port	
	Port Isolation	
Local User Name Password Authentication (2 levels)		
Loopback detection		
Management	SNMP v1/v2c/v3	
	RMON 4 groups	
	WEB (HTTP/HTTPS)	
	CLI (Telnet, Console, SSHv1/v2)	
	Firmware upgrade via console/web/TFTP	
	Configuration Backup/Reload	
	All possible configurations in the CLI must exist in the WEB interface	
	LLDP	



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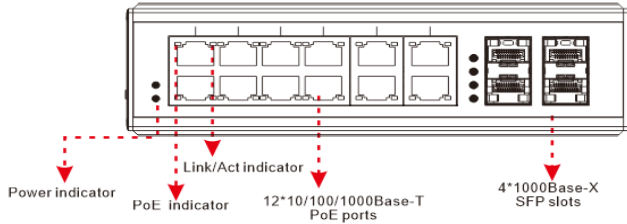
Other Features	DHCP Relay
	DHCP Client
	DHCP Snooping
	DHCP Option 82
	SNTP Client
	BOOTP Client
Maintenance	Ping and Tracert
	System log (Local and Remote)
	Memory and CPU Monitoring
L3 Features	Static Routing
	OSPFv2
	RIPv1/v2
	DHCP Server
IPV6	IPv6 neighbor discovery (ND)
	Path maximum transmission unit (MTU) discovery
	Internet Control Message Protocol (ICMP) version 6
	TCPv6/UDPv6
	Ping6
	Tracert6
	Telnet(v6)
	Http/Https
	IPv6 TFTP
	Static Routing
	Interface IPV6



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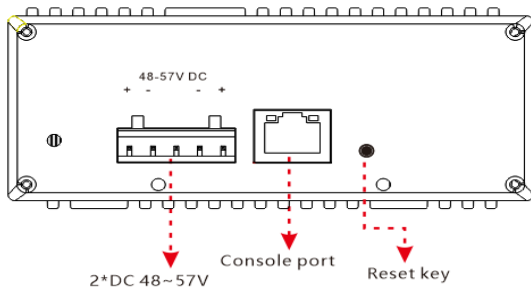
## ❖ Panel diagram

### ● Front panel

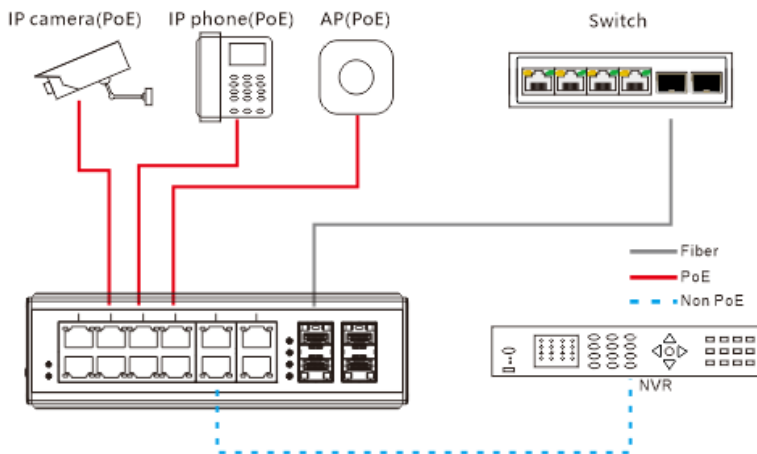


⚠ **Attention 1:** This product must be well grounded against lightning, please use better than 20# cable to connect the grounding terminal and ground.

### ● Left panel



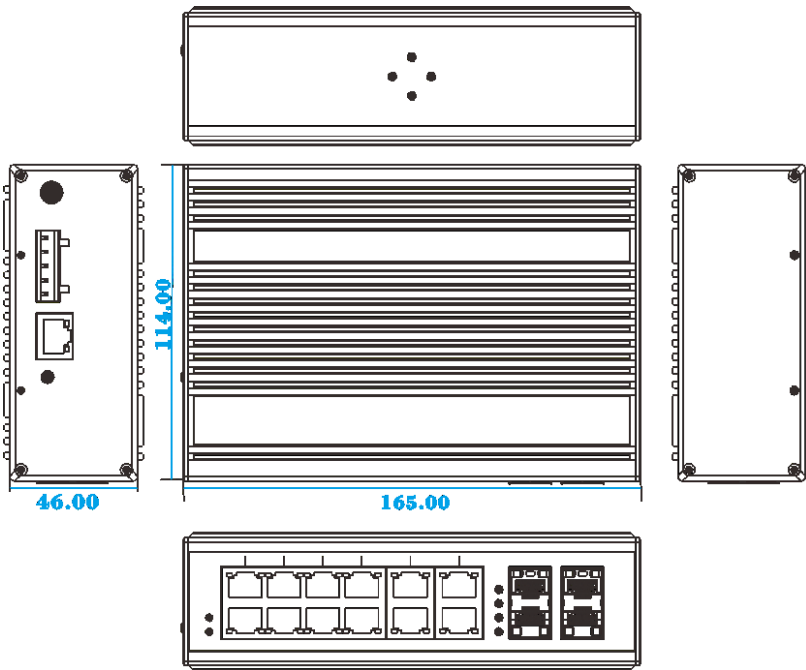
## ❖ Application





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## ❖ Dimensions



## ❖ Order information

Model	Description
BI912PGM4F	12*10/100/1000M PoE ports, 4*1000M SFP ports, 1~16 port support 30W; 2*48~57VDC; Support L3 management, such as OSPF, RIP, QoS, VLAN, MSTP, Multi-broadcast, ports management and PoE management; 6KV surge protection, 8KV contact /15KV air ESD protection.

### **BORN ELECTRONICS LIMITED**

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**WARRANTY:**

2 YEARS (EXPANDABLE UPTO 4 YEARS)

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