

# BI9216PGM4T-500W

16-Ports Gigabit Industrial L3 Managed PoE Switch with 4-Ports 10G SFP+ Uplink

### Datasheet



### **Key Features:**

Ports: Provide 16\*10/100/1000Mbps PoE ports with 4\*1G/10Gbps SFP+
PoE Standard: IEEE802.3af/at Power over Ethernet (PoE) Compliant
Self-adaption: RJ45 port supports 10/100/1000Mbps Auto MDI/MDIX
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.
Layer3 Features, Static route , RIP , OSPF etc.

Working Temperature: -40 to 80 degrees operating temperature Considerate Design: IP40 Industrial design

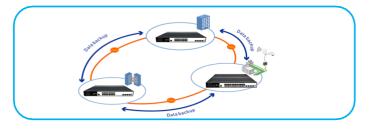
### **Environmentally Hardened Design**

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 BI9216PGM4T-500W can be placed in almost any difficult environment.



### Surge Protection Design

provides contact discharge of  $\pm 8$ KV DC and air discharge of  $\pm 15$ KV DC for Ethernet ESD protection. It also supports  $\pm 6$ KV 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 3 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 BI9216PGM4T-400WS 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.

# 16-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-1G/10G SFP+

### **Technical Datasheet**

Model	BI9216PGM4T-500W	
Hardware Specifications		
Connector	16*10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	4*1/10G Base-X SFP+ Slots Uplink	
	1 Console port, 1 USB Port	
Uplink port	4*1G/10G Base-X SFP+ Slots	
LED Display	Power Indicator: PWR(green).	
	Network Indicator: Link(yellow)	
	POE: Orange	
	SFP: Green	
Thermal Fan	Fanless Design	
	IIEEE 802.3u 100BASE-TX/100BASE-FX	
	IEEE 802.3z 1000BASE-SX/LX	
Notwork Standard	IEEE 802.3ab 1000BASE-T	
Network Standard	IEEE 802.3ae 10Gb/s Ethernet	
	IEEE 802.3x flow control and back pressure	
	IEEE802.3az EEE	
Switch Architecture	Store and Forward	
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex	
Switch Performance	Backplane bandwidth	256Gbps
	Packet forwarding rate	112.32Mpps
	MAC address	16k
Power requirement	AC100-240V 50/60Hz	
ESD Protection	6KV ESD	
Dimension	440mm x 290mm x 44.5mm(17.32in x 11.42in x 1.75in)	
Weight	5kg	
Environment	Operating temperature: -20°C~55°C , operating humidity: 5%~95%	
	Storage temperature: -40°C~75°C , storage humidity: 5%	%~ <b>95</b> %
Safety	FCC Part15 Class A,CE.RoHs	

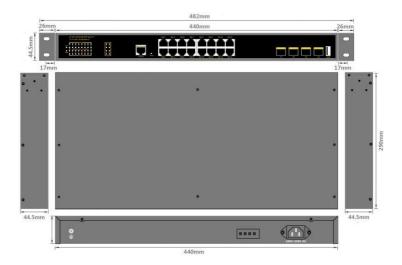
#### Power over Ethernet (PoE) Specifications

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

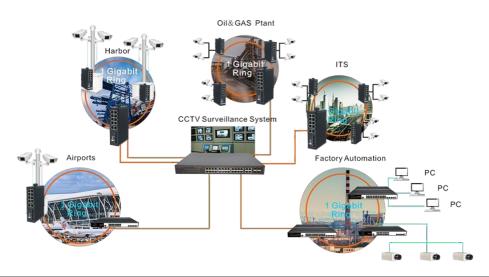
Layer 3 Functions		
Port Mirroring	TX / RX / both Many-to-1 monitor	
	802.1Q tagged-based VLAN	
Vlan	Up to 256 VLAN groups, out of 4094 VLAN IDs	
	802.1ad Q-in-Q tunneling	
	Voice VLAN;Protocol VLAN;Private VLAN (Protected port),GVRP	
Link Aggregation	IEEE 802.3ad LACP and static trunk	
	Supports 8 groups 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	
	Open or close port Standard POE scheduling management Power and current display	
PoE Management	Automatic restarting function of equipment dead machine Timing	
	Support IP bindings restarting	
	IPV4/IPV6 VRRP, the maximum group is 255	
	IPV4/IPV6 static route/default route supports up to 128 entries	
	IPV4 dynamic routing, RIPv1/v2, OSPFv2, 4000 routing entries	
Layer 3 Features	IPV6 dynamic routing OSPFv3, RIPng, IPV6 management, 1000 routing entries	
	L3 network management function, IPV4/IPV6 dual-stack management	
	Layer 3 routing and forwarding, support communication between different network segments	
	and different VLANs	
	8 mapping ID to 8 level priority queues	
	Port number	
	802.1p priority	
QoS	802.1Q VLAN tag	
	DSCP field in IP packet	
	Traffic classification based, strict priority and WRR	
	IEEE 802.1X port-based authentication	
	Built-in RADIUS client to co-operate with RADIUS server	
Convity	RADIUS / TACACS+ user access authentication ; IP-MAC port binding ; MAC filtering ;	
Security	Static MAC address ; DHCP Snooping and DHCP Option82 ; STP BPDU guard,	
	BPDU filtering and BPDU forwarding ; DoS attack prevention ; ARP inspection	
Management Eurotice		
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 2819 RMON (1, 2, 3, 9)	
	RFC 2863 Interface Group MIB	
	RFC 3635 Ethernet-like MIB	

## 16-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-10G SFP+

## Structure Diagrams



# Applications



Ordering Information	
BI9216PGM4T-500W	16 Ports 10/100/1000Mbps Industrial Managed PoE switch With 4 Ports 1G/10G SFP+,Rack mount Installation, IEEE802.3af/at



#### BI9216PGM4T-500W Industrial Layer 3 Managed PoE Switch