

# Alcon Layer 2+ Giga Managed Industrial PoE Switch

Solid shell Design, guarantee the stable operation.



-40-75°C  
Operating  
Temperature



Layer2+  
Managed



IP40  
Grade  
Protection



6KV Industrial  
Lightning  
Protection



High  
Performance  
Industrial grade device



Dual power supply  
redundancy  
No worries to change

## Features

### Switching Features

- IP-Mac-VLAN- Port Binding
- QoS, LLDP
- STP/RSTP/MSTP
- SNMP (V1/V2/V3), RMON
- Link aggregation
- Port Mirroring, Bandwidth Control
- Broadcast storm control

### Advanced Features

- IGMP Snooping V1/V2/V3
- Static and dynamic aggregation
- L2 / L3 ACL

### Network Redundancy

- Dual power input for redundant power supplies
- Ethernet Ring Protection Switching (ERPS)

### Robust Design

- IP40-rated metal housing
- Fanless, passive cooling design
- Shock Proof, Anti Vibration, Free Fall

## Product Overview

Alcon Giga L2+Managed Industrial grade PoE Switch is based on a new generation of high-performance hardware & Software Combination with affordable cost for all types of projects. It has 8\*10/100/1000Base-TPoE ports Port 1-8 can support IEEE802.3af/at standard. Single port maximum power 30W. and 2/4/8\*100/1000Base-X SFP fiber ports. Each port can support wire-speed forwarding

The reliable industrial series having advanced features such as electromagnetic compatibility, anti-vibration and anti-shock capability, and IP40 protection, can be widely used in energy, transportation, industrial production, environmental protection, military industries & etc.

The Alcon has L2+ network management function, support IPV6 static route forwarding, complete security protection mechanism, ACL/QoS policy and rich VLAN functions, easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP(<50ms), Support ERPS ring network function(-convergence time<20ms) to improve link backup and network. The shell is made of aluminum alloy, which has excellent industrial field environmental adaptability (including mechanical stability, climate environment adaptability, electromagnetic environment adaptability, etc.), protection level is IP40, support dual redundant power supply, low power consumption and no fan, 3/5-year warranty. It is suitable for industrial scenarios such as intelligent transportation, rail transit, electric power industry, mining, petroleum, shipping, metallurgy and green energy construction to establish a cost-effective, stable and reliable communication network.

## Model Lists



AL-PGIS5010M-8P-2S-240



AL-PGIS5012M-8P-4S-240



AL-PGIS5016M-8P-8S-240

## Robust Industrial Managed Switch

Durable, Reliable, Flexible & Smart Network for Harsh Environments.

### Rugged Industrial Grade

Equipped with anti-dust IP40-rated aluminum alloy case, the switch is designed and certified to withstand a high degree of vibration, shock, free-fall protection and against ESD/EMI surge for harsh environments.\*

### Reliable Dual Redundancy

Supports network redundancy with RSTP, MSTP, LACP and power redundancy with two power inputs to ease the unexpected risk and ensure stable and reliable network service quality.

### PoE PD Alive Check

PoE Powered Device (PD) alive check to monitor real-time status of connected PDs and enable to reboot fail PDs to enhance the reliability of the network.

### High/Low Temp. Resistance

The industrial switch operates with a wide temperature range from -40°C to 75°C (-40°F to 167°F) for industrial and outdoor network deployment with capability of withstanding the extreme hot and freezing environments.

### Smart & Secure Mgmt.

The industrial switch features smart and simple network monitoring tools that allow for improved network efficiency and security.

### Fanless Design

With no moving parts inside to reduce downtime and maintenance call outs, the rugged housing has been optimised for the transfer of heat.

## Application



Manufacturing



Energy Plant



Transportation, Smart City



Factory Automation

## Advanced Features

### Gigabit access, SFP fiber port uplink, Integrated Bypass function

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support physical single-mode single fiber optical path(Bypass) function, pure hardware switching, short switching time, does not affect the data transmission rate and improves the stability of the network system.

### Security

- 802.1X authentication.
- Port isolation, storm control.
- IP-MAC-VLAN-Port binding.

### Stable and reliable

- CE, RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

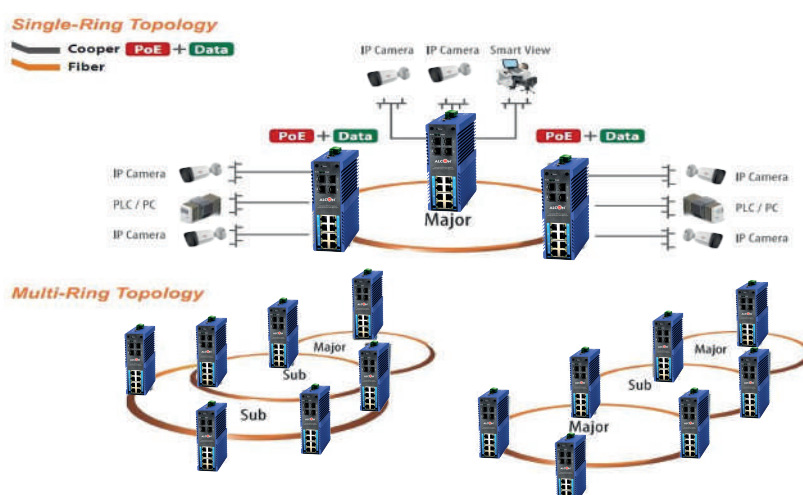
### Network management and fast ring function

- STP/RSTP/MSTP/ERPS.
- Static and dynamic aggregation.
- IEEE802.1Q VLAN, flexible VLAN division, Access, Trunk and Hybrid.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- IGMP Snooping V1/V2/V3 meets multi-terminal high-definition video surveillance and video conference access requirements.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.

### One-stop remote control and management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics. CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).

## Application & ERPS (Ethernet Ring Protection Switching) topology



## Product Specification

		AL-PGIS5010M-8P-2S-240	AL-PGIS5012M-8P-4S-240	AL-PGIS5016M-8P-8S-240
Attributes	RJ45 SFP Switching Capacity Forwarding rate	8x10/100/1000BASE-TX 2* 1.25Gbps 24Gbps 14.88Mpps	8x10/100/1000BASE-TX 4* 1.25Gbps 24Gbps 17.865Mpps	8x10/100/1000BASE-TX 8* 1.25Gbps 40Gbps 23.808Mpps
PoE+	Standards Ports Power	IEEE802.3af,802.3at 8 30W	IEEE802.3af,802.3at 8 30W	IEEE802.3af,802.3at 8 30W
Housing	Material Installation	Aluminum alloy DIN rail/wall mount	Aluminum alloy DIN rail/wall mount	Aluminum alloy DIN rail/wall mount
Power supply	Input Power	48-57 VDC// 5A (MAX) Full Load ≤240W	48-57 VDC// 5A (MAX) Full Load ≤240W	48-57 VDC// 5A (MAX) Full Load ≤240W
Working	Temperatur Humidity	-40°C - 75°C 10%RH - 90%RH, non-condensing	-40°C - 75°C 10%RH - 90%RH, non-condensing	-40°C - 75°C 10%RH - 90%RH, non-condensing
Storage	Temperatur Humidity	-40°C - 85°C 10%RH - 90%RH, non-condensing	-40°C - 85°C 10%RH - 90%RH, non-condensing	-40°C - 85°C 10%RH - 90%RH, non-condensing
VLAN	Port configuration of Access, Trunk, Hybrid 4K VLAN based on port, IEEE802. 1q, VLAN based on the protocol			
Port Aggregation	LACP, Static aggregation Max 3 aggregation groups and 8 ports per group.			
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802. 1w), MSTP (IEEE802. 1s)			
Multicast	Multicast VLAN, Fast log out IGMP Snooping v1/v2, Max 1024 multicast groups			
Port Mirroring	Bidirectional data mirroring based on port			
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802. 1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)			
ACL	Port-based Issuing ACL,ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.			

Security	IP-MAC-VLAN-Port binding ARP inspection, Anti-DoS attack AAA & RADIUS, MAC learning limit Mac black holes, IP source protection IEEE802.1X & MAC address authentication Broadcast storm control, Backup for host datum SSH 2.0, SSL, Port isolation, ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client, DHCP Snooping, DHCP Server
Management	SNMP V1/V2C/V3, LLDP Web Management (HTTPS) NTP, System work log, Ping Test CPU instant utilization status view Cable Diagnose, One-key recovery Console/AUX Modem/Telnet/SSH2.0 CLI ONV NMS platform cluster management (LLDP+SNMP) Download & Management on FTP, TFTP, Xmodem, SFTP
System	Category 6 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer 10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

## Ordering Information

Item	Description
AL-PGIS5010M-8P-2S-240	8-Port Gigabit RJ45 + 2-Port Gigabit SFP Layer2+ Managed Industrial Switch Support Up to 240Watt Power Budget
AL-PGIS5012M-8P-4S-240	8-Port Gigabit RJ45 + 4-Port Gigabit SFP Layer2+ Managed Industrial Switch Support Up to 240Watt Power Budget
AL-PGIS5016M-8P-8S-240	8-Port Gigabit RJ45 + 8-Port Gigabit SFP Layer2+ Managed Industrial Switch Support Up to 240Watt Power Budget



Product specifications and availability are subject to change without notice.

