## **120W Managed Gigabit PoE+ switch** 10-Port PoE+ Gigabit including 2 Ports SFP

## **Complete management functions including**

- IGMP Ring Network
- VLAN Policy (Design for Video Conferring | Surveillance )
- PoE Watchdog and PoE Management

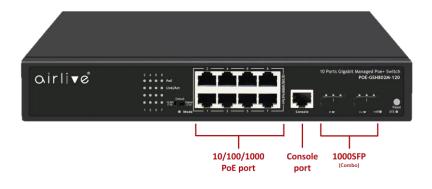


POE-GSH802M-120

# SNMP & PoE managed Switch with Advanced VLAN Policy for Video Conferring | Surveillance | Voice | Data

The AirLive POE-GSH802M-120 is a L2 managed 10-port Gigabit PoE+ switch including 8 PoE ports and 2 Gigabit SFP ports with high 120W PoE power. Each PoE port is 802.3at/af compliant up to 30W, automatically adaptive. Data and Power supply will be transferred over Cat. 5e cables at the same time. For non-PoE device detected, only data is transferred.

The 10-port Gigabit management switch offers comprehensive SNMP management functions including IGMP, VLAN Division, Port aggregation, QoS port mirroring, bandwidth control. Its unique "VLAN Division Policy function" allows setting "Video Conference, Surveillance, Voice, or Data" such important VLAN group at higher priority that prevents package loss or lags.



# Features

- All 10-port, each port delivers Gigabit high speed
- Extend the network further with 2 SFP slots that accept fiber transceivers and go beyond the limits of Ethernet
- 120W High PoE power, ensure full power for connected device
- Automatically detect and offer power for connected PD
- Support L2 SNMP and WEB Smart management function, including DHCP Snooping, VLAN, IGMP, QoS, Spanning Tree, MAC Binding and Bandwidth Control
- Surveillance VLAN property and Voice VLAN support for high priority transmission
- Support PoE management
- Support PoE watchdog to automatically detect and restart crashed PD
- Clear Statues display including traffic, CPU, Memory, POE consumption, per-port status
- Web-UI for easy management; CLI and Command Script for advance setting; SNMP used for popular network tools management.

# Major Specifications

- 8 x 30W PoE 10/100/1000
- 2 x 1000 SFP
- 802.3at/802.3af compliant
- Each port up to 30Watts; PoE Power 120W
- Lighting Surge ESD protection: 6KV / Port ESD Static Protection: 15KV /Switch
- L2 SNMP v1/2/3, Trap
- PoE management, PoE Watchdog
- Authentication: 802.1x, AAA, TACACS+
- SNMP, WEB, CLI, SSH, Telnet, RMON
- VLAN Division (Surveillance, Voice, MED Conference, Data)
- DHCP Snooping prevents unauthorized router installed
- Support 802.3az Energy Efficient Ethernet
- Fan-less design



# Efficient PoE Watch Guard PoE Watch dog technology and PoE Management

POE-GSH802M-120 supports 120W high power and each port up to 30W auto adaptively. With PoE management function to control PoE port setting, Timer setting and Timer reboot setting and PoE watchdog. All the PoE management functions ensure full power for the connected PD and great reliability for the whole system.

After PoE Watchdog function enabled, the POE-GSH802M-120 can work as a virtual security guard. When the POE port is continuously powered but there is no traffic, the POE watchdog will be triggered. After 2 minutes of detection, the power supply will be stopped and then powered on. PoE Watchdog is specially helpful for camera. For example, when turning on the function, the switch will detect the front-end camera for 24/7. If there is no traffic output from the camera, it will be judged that the camera is frozen and the front-end camera will be restarted through PoE power failure to solve the problem.



# Surveillance VLAN Support

POE-GSH802M-120 supports unique "VLAN division" function for setting up important VLAN group at high priority to make sure whole system's performance and reliability. Its VLAN Division function including Surveillance VLAN, Voice VLAN, MED Network (Video Conferring) and Data VLAN. For example, when enable Surveillance VLAN functions that ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data.

VLAN Di	ivision: Enable Survei	llance VLAN in high p	riority	VLAN >> Surve	llance VLA	N )) Property	
				State VLAN CoS / B02.1p Remarking Aging Time	Enable    None     Enable    Enable    1	Min (30 - 65536, default 1440)	
AC.TOP	AC.TOP	IPCAM	IPCAM				
Data	VLAN	Surveillan	e VLAN				

# VLAN Policy for Video Conferring/Voice/Data

Add MED Network Policy

User can define policy for video conferring / voice data in high priority. Ensure your video meeting will not lag coursing by any networking jam.

Policy ID	1 🗸	
Application	Voice 🗸	
	Voice	
VLAN	Voice Signaling	Range (0 - 4095)
	Guest Voice	
VLAN Tag	Guest Voice Signaling	
VEAN Tug	Softphone Voice	
	Video Conferencing	
Priority	Streaming Video	
DSCP	Video Signaling	
DSCP		

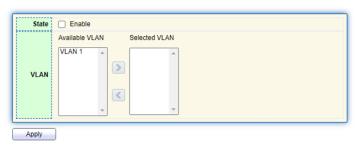




## **DHCP Snooping Support**

Managing DHCP server; prevent stranger / Hacker.

Security >> DHCP Snooping >> Property



# RMON Statistics Support

For each port and different packets item.

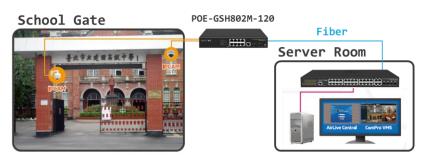
tatistics Table														
fre	sh Rate	0 🗸	sec											
	Entry	Port	Bytes Drop Received Events	Packets	Broadcast	Multicast	CRC & Align	Undersize	Oversize	Fragments	Jabbers	Collisions	Frames of	
	,			Events	Received Pa	Packets	Packets Packets	Errors	Packets	Packets		Casherd		64 Byte
)	2	GE2	0	0	0	0	0	0	0	0	0	0	0	
]	3	GE3	0	0	0	0	0	0	0	0	0	0	0	
	4	GE4	0	0	0	0	0	0	0	0	0	0	0	
	5	GE5	0	0	0	0	0	0	0	0	0	0	0	
]	6	GE6	0	0	0	0	0	0	0	0	0	0	0	
]	7	GE7	0	0	0	0	0	0	0	0	0	0	0	
)	8	GE8	0	0	0	0	0	0	0	0	0	0	0	
)	9	GE9	0	0	0	0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	0	

# Fiber for cross-floor connection or Long Distance

Extend the network further with SPF slots.



**Built-in SFP for cross-floor connection** 



Built-in SFP for long distance connectivity



# Specification

## Model

#### Hardware

- Device Interface:
  - 8 x 30W PoE 10/100/1000 RJ45 2 x ports Gigabit SFP 10-port totally 1 x RJ45 console port
- Standard
  - IEEE802.3u 100Base-TX / 100Base-FX IEEE802.3ab Gigabit 1000Base-T IEEE802.3z Gigabit SX/LX (optical fiber) IEEE802.3x Flow Control and Back Pressure IEEE802.3ad Standard method for performing link aggregation IEEE802.1d Spanning Tree (STP) IEEE802.1w Rapid Spanning Tree (RSTP) IEEE802.1s Multiple Spanning Tree (MSTP) IEEE802.1p Class of Service (QoS / CoS) traffic Prioritization (Multicast filtering function) IEEE802.1Q VLAN Bridge Operation IEEE802.1x Client/Server Access control and Authentication IEEE802.3at/af PoE IEEE802.3az Energy Efficient Ethernet IEEE802.1ab LLDP/LLDP-MED Device Link Layer **Discovery Protocol**

#### LED Indicators:

PWR (power supply), SYS(System), 1-8 PoE, 1-8 Link & ACT , 9-10 Link & Act, Mode (DIP Indicator) VLAN/Default/Extend

- Lighting Surge Protection:
   6KV (general mode), 4KV (differential mode), ESD15KV
- Mechanical
   Solid metal 10" 1U rack-mountable, fan-less
- Power and PoE
- Protocol: IEEE802.3at (30W), IEEE802.3af (15.4W)
- PoE Port: 8
- PoE Power Output / PoE Port: max. 30 watts
- PoE Power Output / PoE switch: max. 120 watts
- Power Input: AC100~240VAC, 120W

#### Switch Architecture | Performance

 Fiber Medium Multi-mode Fiber: 50/125, 62.5/125, 100/140μm Single-mode Fiber: 8/125, 8.7/125, 9/125, 10/125μm

 Switching architecture: Store and Forward Switch Capacity: Back-plan up to 20Gbps Switch packets Capacity; 14.88Mbps MAC Address: 8K Jumbo Frames: 9.6Kbytes Packet Buffer: 4Mb Flash Memory: 16MB DDR SDRAM: 128MB

## AirLive POE-GSH802M-120

#### **L2 Management Function**

- Port Management: Enable / Disable Port Speed, Duplex, MTU setting Flow-Control Port Information Check
- Port Mirroring:
   Support both side-way port mirroring
- Port Speed Limit:
   Port-based input/output bandwidth management
  - **Port Isolation:** Support the downlink port isolation, and able to communicate with the uplink port
- Storm Suppression: Support unknown unicast, multicast, unknown multicast Broadcast type storm suppression Storm suppression based on bandwidth regulation and storm filtering
   Link Appropriation:

## Link Aggregation:

Support static manual aggregation Support LACP dynamic aggregation Support based on IP, MAC, mixed load-balancing modes Support Maximum 8 aggregation groups

## • VLAN:

Support 4K VLAN Access, Trunk, Hybrid Support Port-based, Protocol-Based, MAC-Base VLAN partitioning Support Generic GVRP dynamic VLAN registration Voice VLAN

#### • MAC:

Support static, dynamic, filtered, addition, deletion MAC address learning limit Dynamic aging time setting

#### Spanning Tree

Support STP 802.1d Spanning Tree protocol Support RSTP 802.1w Spanning Tree protocol Support MSTP 802.1w Spanning Tree protocol Support Multi-instance, Support Aggregate interface Support BPDU protection

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#### Multicast:

Support Static addition, deletion Support IGMP-Snooping Support MLD-Snooping Support v1/2/3 dynamic multicast monitor

- DDM: Support SFP DDM
- Layer 3 Switching: IPv4 Static Routing IPv6 Static Routing DHCP Server

# Specification

### Model

#### L2 Management Extension Function

- ACL (Access Control List): Based on source MAC, destination MAC, Protocol type, source IP, destination IP, L4 port
- QoS:
  - Based on 802.1p (CoS) classification
  - Based on DSCP Classification

Classification based on source IP, destination IP and port number

Support SP, WRR scheduling strategy Support flow rate limit CAR

- LLDP Discovery: Support LLDP discovery protocol, LLDP with LLDP-MED extensions (IPv4 ACL, IPv6ACL, MAC ACL)
- User Settings:
- ADD/Delete users
  Log:
- User login, operation, status, events
- Anti-attack (Security):
   DOS defense (port-based)
   Support CPU protection and limits the
  - Support CPU protection and limits the rate of sending CPU packets ARP binding (IP, MAC, PORT binding)
- IPv6: Support IPv6 Ping, IPv6 Traceroute, IPv6 Telnet Support IPv6 SSH Support IPv6 HTTP, IPv6 HTTPS
- Certification | Authentication: Support 802.1x port authentication Support AAA authentication Support TACAS+ authentication
- Network diagnosis: Support Ping, Telnet, Trace
- System Management: Device reset, configuration save/restore, upgrade management, time setting, etc.

## AirLive POE-GSH802M-120

## System Management

- CLI: Support serial port command line management
- SSH: Support SSHv1/2 remote management
- Telnet: Support Telnet remote management
- WEB: Support Layer2 setting, layer2 and layer3 monitor
- SNMP: SNMP V1/V2/V3; support trap (ColdStart, Warmstart, LinkDown, LinkUp)
- RMON (remotely management)
   Support RMON1
- PoE: Support PoE power
- Other Functions

Support DHCP Snooping, Option 82, DHCP Server Support dynamic ARP detection Support DNS certification Support Port security settings Support MVR protocol Support cable detection VCT function Support UDLD protocol

#### **Environment**

- **Operating Temperature:** -20°C to +50°C
- Storage Temperature: -40°C to +85°C
- Working Humidity: 10%~90%, non-condensing
- Storage Humidity: 5%~90%, non-condensing

#### Standard package of switch

- Product size:
- 26.8 x 18.1 x 4.4 cm(L\*W\*H)
- Package size:
- 31.2 x 26 x 8.4 cm(L\*W\*H)
- Product Weight:
- N.W: 1.2KGs; G.W: 1.7KGs
- Package content:
   1 x Switch, 1 x Power cord, 1 x Serial cable
  - 1 x Mounting bracket 1-pair

## Standard carton package

- Quantity: 10 pcs / 1 carton
- Dimensions 54 x 43.5 x 33.2 cm
- Weight 18KGs

## **Ordering Information**

- Model:
  - POE-GSH802M-120
- Name:
  - L2 Managed Gigabit PoE+ 802.3at switch, 120W 10 Ports including 2-port SFP Fiber

NOTE
 Specifications are subject to change without prior notice.





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