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

POE-GSH802M-120

airlive®

IGMP Ring
Network

VLAN Policy
(Video Conferring |
Surveillance | Voice | Data)

PoE Watchdog

PoE
Management

120W Power

Overview

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.

10/100/1000
PoE port

Console
port

1000SFP
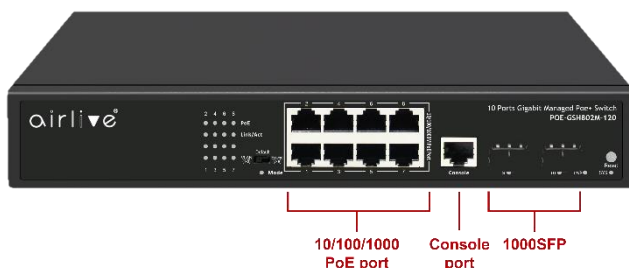
Features

- 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.
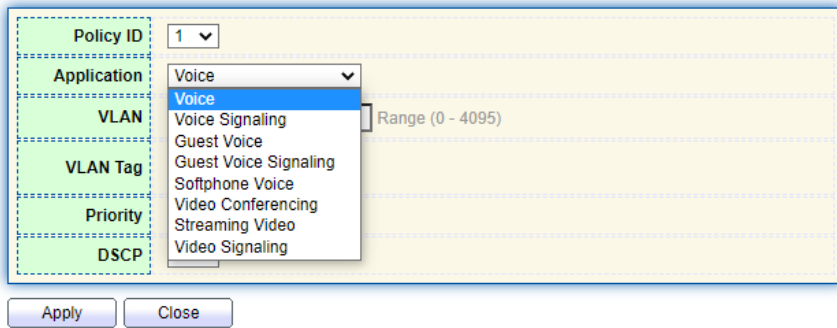
VLAN Policy for Video Conferring/Voice/Data

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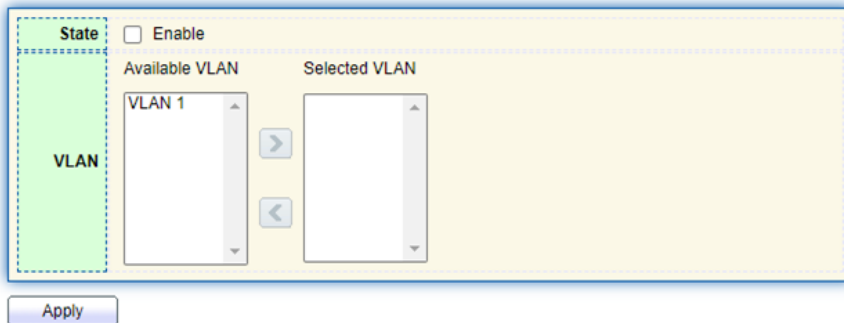

DHCP Snooping Support

Managing DHCP server; prevent stranger / Hacker.

RMON Statistics Support

For each port and different packets item.
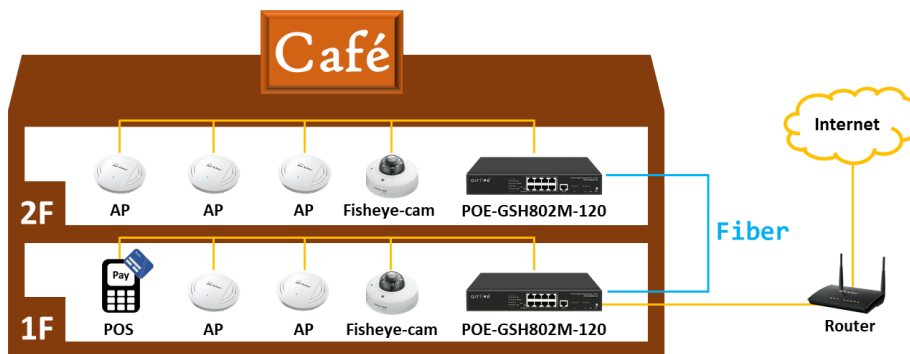
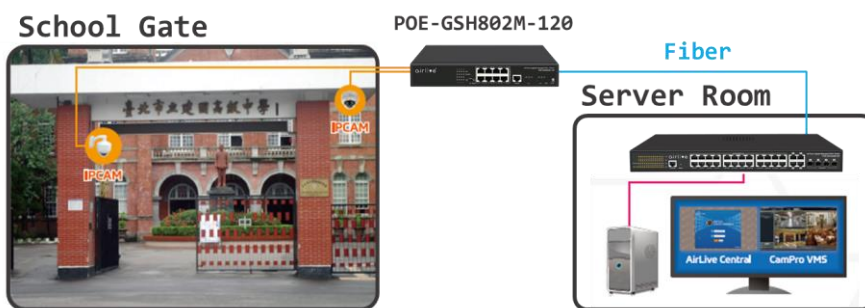Management 》 RMON 》 Statistics

Statistics Table

Refresh Rate 0 sec

	Entry	Port	Bytes Received	Drop Events	Packets Received	Broadcast Packets	Multicast Packets	CRC & Align Errors	Undersize Packets	Oversize Packets	Fragments	Jabbers	Collisions	Frames of 64 Bytes
☐	2	GE2	0	0	0	0	0	0	0	0	0	0	0	0
☐	3	GE3	0	0	0	0	0	0	0	0	0	0	0	0
☐	4	GE4	0	0	0	0	0	0	0	0	0	0	0	0
☐	5	GE5	0	0	0	0	0	0	0	0	0	0	0	0
☐	6	GE6	0	0	0	0	0	0	0	0	0	0	0	0
☐	7	GE7	0	0	0	0	0	0	0	0	0	0	0	0
☐	8	GE8	0	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
☐	10	GE10	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	AirLive POE-GSH802M-120

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; 14.88Mpps
  MAC Address: 8K
  Jumbo Frames: 9.6Kbytes
  Packet Buffer: 4Mb
  Flash Memory: 16MB
  DDR SDRAM: 128MB

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 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
- **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 will be changed without prior notice

AirLive

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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 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 TACACS+ authentication
- **Network diagnosis:**
  Support Ping, Telnet, Trace
- **System Management:**
  Device reset, configuration save/restore, upgrade management, time setting, etc.

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:** -10°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

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