

200W Managed Gigabit PoE+ switch

20-Port PoE+ Gigabit incl 2 SFP and 2 RJ-45 Ports Uplink

POE-GSH1602M-200

airlive®



IGMP Ring
Network

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

PoE Watchdog

PoE
Management

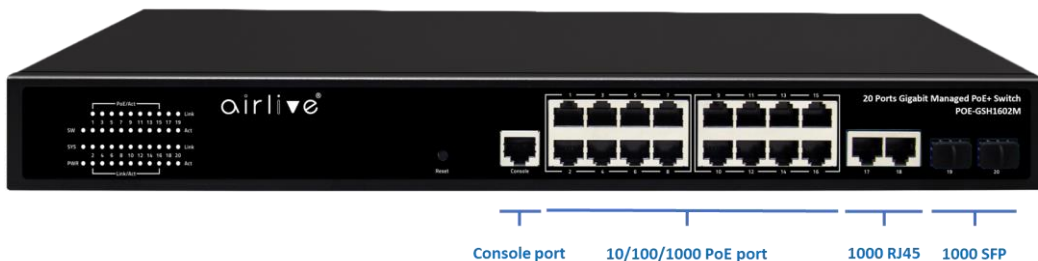
200W Power

Overview

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

The AirLive POE-GSH1602M-200 is a L2+ managed 20-Port Gigabit PoE+ switch including 16 PoE ports and 2 Gigabit SFP and 2 RJ45 Uplink ports with high 200W 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 20-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 20-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, plus 2 extra RJ45 slots
- 200W 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.

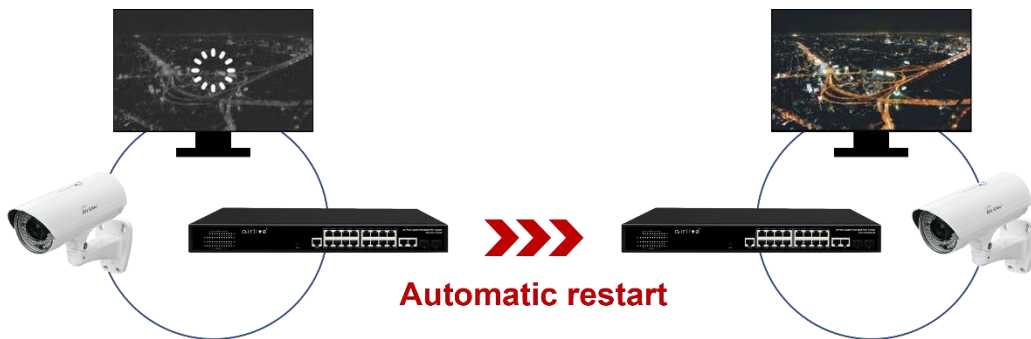
Major Specifications

- 16 x 30W PoE 10/100/1000
- 2 x 1000 SFP Uplink
- 2 x 1000 RJ45 Uplink
- 802.3at/802.3af compliant
- Each port up to 30Watts; PoE Power 200W
- Lighting Surge ESD protection: General 4KV, Differential 2KV, ESD 8KV air, 6KV contact
- 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-GSH1602M-200 supports 200W 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-GSH1602M-200 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-GSH1602M-200 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 Conferencing) 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 Division: Enable Surveillance VLAN in high priority

AC.TOP AC.TOP
Data VLAN

IPCAM IPCAM
Surveillance VLAN

VLAN >> Surveillance VLAN >> Property

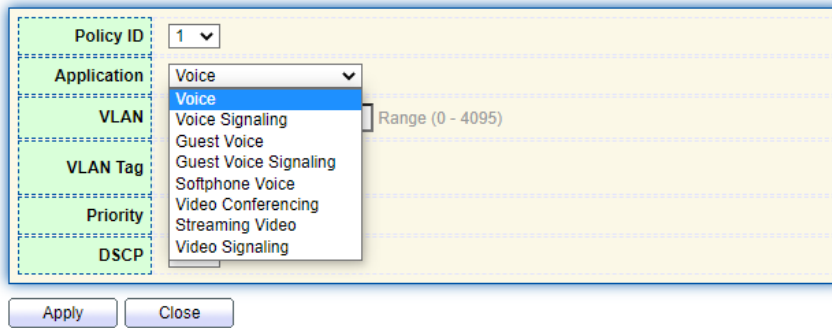
State	<input checked="" type="checkbox"/> Enable
VLAN	None
Cos / 802.1p	<input checked="" type="checkbox"/> Enable
Remark	1
Aging Time	1440 (Min 30 - 65536, default 1440)

Apply

VLAN Policy for Video Conferencing/Voice/Data

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

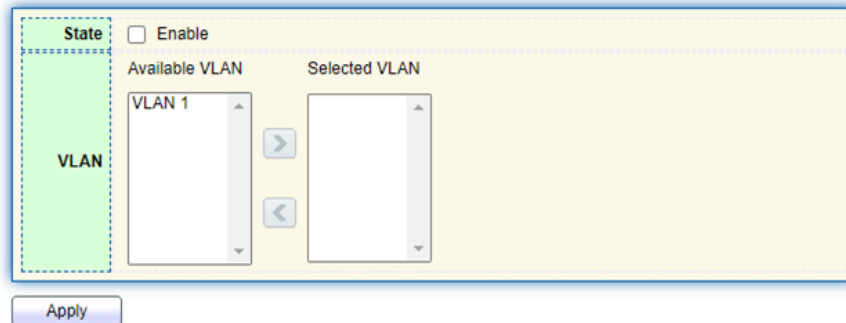
Add MED Network Policy



DHCP Snooping Support

Managing DHCP server; prevent stranger / Hacker.

Security >> DHCP Snooping >> Property



RMON Statistics Support

For each port and different packets item.

Management >> RMON >> Statistics

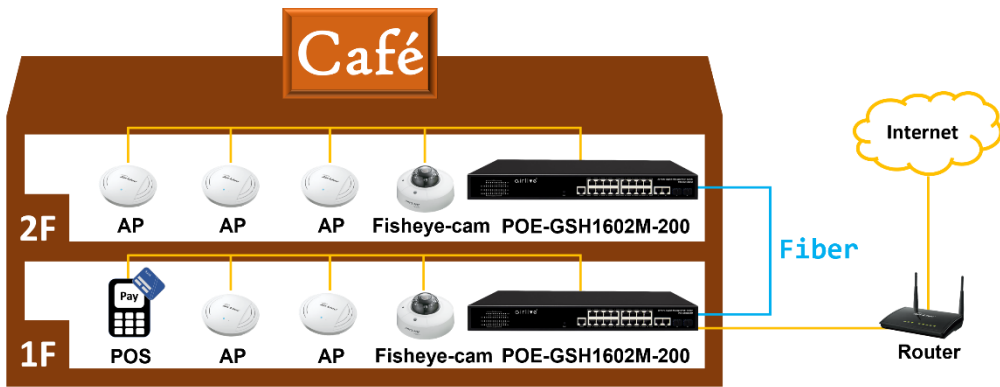
Statistics Table

Refresh Rate sec

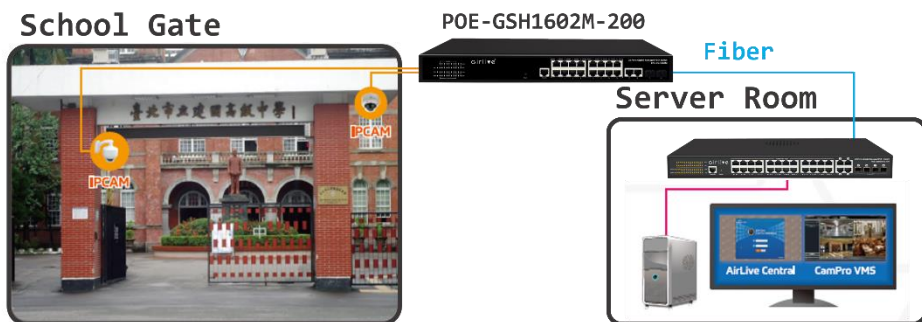
Entry	Port	Bytes Received	Drop Events	Packets Received	Broadcast Packets	Multicast Packets	CRC & Align Errors	Undersize Packets	Oversize Packets	Fragments	Jabbers	Collisions	Frames of 64 Bytes
<input type="checkbox"/>	2 GE2	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	3 GE3	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	4 GE4	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	5 GE5	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	6 GE6	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	7 GE7	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	8 GE8	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	9 GE9	0	0	0	0	0	0	0	0	0	0	0	0
<input type="checkbox"/>	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

Model	AirLive POE-GSH1602M-200
<p>Hardware</p> <ul style="list-style-type: none"> • Device Interface: 16 x 30W PoE 10/100/1000 RJ45 2 x ports Gigabit SFP 2 x ports Gigabit RJ45 20-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), PoE/ACT (PoE), Link/ACT • Lighting Surge Protection: General 4KV, Differential 2KV, ESD 8KV air, 6KV contact • Mechanical Solid metal 1U rack-mountable, fan-less <p>Power and PoE</p> <ul style="list-style-type: none"> • Protocol: IEEE802.3at (30W), IEEE802.3af (15.4W) • PoE Port: 16 • PoE Power Output / PoE Port: max. 30 watts • PoE Power Output / PoE switch: max. 200 watts • Power Input: AC100~240VAC <p>Switch Architecture Performance</p> <ul style="list-style-type: none"> • 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 Bandwidth: 40Gbps Switch Packet Forwarding rate; 29.76Mpps MAC Address: 8K Jumbo Frames: 9.6Kbytes Packet Buffer Memory: 4Mb Flash Memory: 16MB DDR SDRAM: 128MB 	<p>L2/L2+ Management Function</p> <ul style="list-style-type: none"> • 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 multicast, unknown unicast 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 (8 ports per aggregation group) • VLAN: Support 4K VLAN Access, Trunk, Hybrid Support Port-based 802.1Q VLAN, MAC VLAN, IP VLAN Support Generic GVRP dynamic VLAN registration Voice VLAN • MAC: Support static, dynamic, filtered 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 802.1s Spanning Tree protocol Support Multi-instance, Support Aggregate interface Support BPDU protection • Multicast: Support IGMP v1/v2/v3 Snooping Support MLD v1/v2 Snooping Support Layer 2 multicast fast leave mechanism, querier Support Layer 2 IPv4 static multicast Support Layer 2 IPv6 static multicast Support IGMP v1/v2/v3 Layer 3 multicast • DDM: Support SFP DDM • Layer 3 Switching: IPv4 Static Routing IPv6 Static Routing DHCP Server

* Specification will be changed without prior notice



Model	AirLive POE-GSH1602M-200
<p>L2 Management Extension Function</p> <ul style="list-style-type: none">• 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.	<p>System Management</p> <ul style="list-style-type: none">• 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 RMON V2• 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 <p>Environment</p> <ul style="list-style-type: none">• Operating Temperature: -10°C to +50°C• Storage Temperature: -40°C to +70°C• Working Humidity: 10%~90%, non-condensing• Storage Humidity: 5%~90%, non-condensing <p>Standard package of switch</p> <ul style="list-style-type: none">• Product size: 44 x 20.4 x 4.4 cm(L*W*H)• Package size: 50 x 29 x 8.5 cm(L*W*H)• Product Weight: N.W: 2.78Kgs; G.W: 3.44Kgs• Package content: 1 x Switch, 1 x Power cord, 1 x Serial cable 1 x Mounting bracket 1-pair <p>Standard carton package</p> <ul style="list-style-type: none">• Quantity: 5 pcs / 1 carton• Dimensions 52 x 44.5 x 31 cm• Weight 18.2Kgs <p>Ordering Information</p> <ul style="list-style-type: none">• Model: POE-GSH1602M-200• Name: L2+ Managed Gigabit PoE+ 802.3at switch, 200W 20 Ports including 2-port SFP Fiber and 2-port RJ45

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