

L2+ Managed Multi Gigabit Fiber Switch

14-Port Gigabit incl 12 x 1G SFP, 2 x 1G RJ-45

SNMP-GSF12M

airlive®



IGMP/ERPS Super Ring Network

Gigabit SFP, RJ45

VLAN Policy Voice

1G SFP Fiber Backbone

-20°C~+55°C

Overview

SNMP & Fiber managed Switch with Advanced VLAN Policy for Voice | Data

The AirLive SNMP-GSF12M is an L2+ managed 14-port Multi Giga Fiber switch including 12 x 1G SFP and 2 RJ-45 ports. It supports comprehensive SNMP management function such as IGMP ERPS Super Ring Network, VLAN Division, Port aggregation, QoS port mirroring, bandwidth control. Providing VLAN Division Policy function for setting higher priority for Video Voice, or data that prevents package loss or lags. Full 12 Port Gigabit fiber connections which can work as the backbone of your network.



Console Port ———— 10/100/1000 Port ———— 1000 SFP Port

Features

- Full 12 ports Fiber delivers Gigabit high speed
- 2 Ethernet ports delivers Gigabit high speed
- Support L2+ SNMP and WEB Smart management function, including DHCP Snooping, VLAN, IGMP, QoS, Spanning Tree, MAC Binding and Bandwidth Control
- Voice VLAN support for high priority transmission
- Clear Statuses display including traffic, CPU, per-port status
- Web-UI for easy management; CLI and Command Script for advance setting; SNMP used for popular network tools management.

Major Specifications

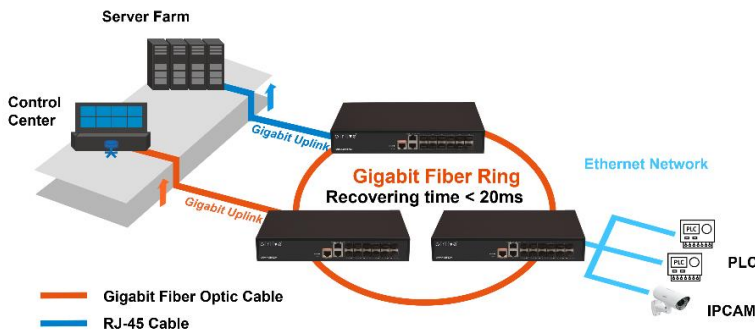
- 12 x 1000 SFP
- 2 x 10/100/1000 RJ-45
- Lighting Surge ESD protection: 4KV 8/20us
- L2 SNMP v1/2/3
- Authentication: 802.1x, AAA
- SNMP, WEB, CLI, SSH2.0, Telnet
- VLAN Division Voice
- DHCP Snooping prevents unauthorized router installed

ERPS Ethernet Super Ring Protection

ERPS is supported by the SNMP-GSF12M Switch. ERPS supports multi-ring and multi-domain structures (master and sub rings) and optimizes the inspection mechanism in terms of two-way faults. In addition, it supports main device backups, load sharing and other work methods in <20ms switching.

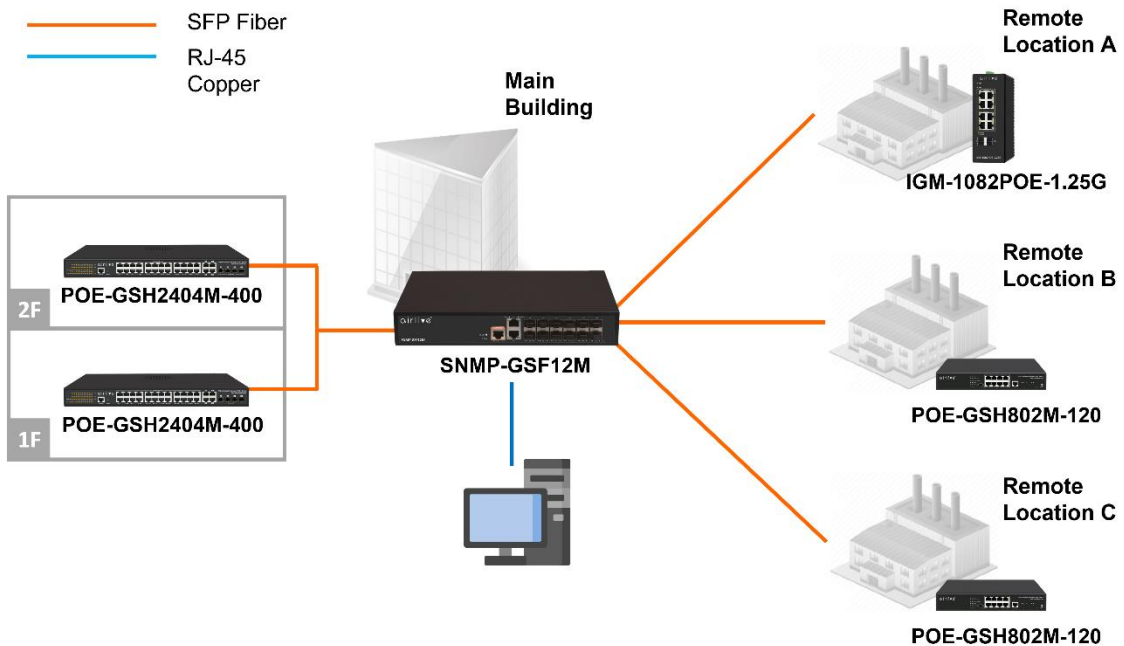
This means that when multiple switches have been placed in a Ring and the network work is interrupted, it will recover within 20ms or less. Meaning the critical network like automated production lines and surveillance will be online again with minimum loss of time. The ring network is also protected against loops.

ERPS Ethernet Ring Network with Recovering Time < 20ms



Multiple Fiber for Interconnect, at Gigabit speed

Full 12 Port Gigabit fiber connections which can work as the backbone of your network.



Built-in SFP for long distance connectivity

VLAN Policy for Voice – set in high priority to avoid of voice lag

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

Why people need VLAN and what VLAN for?

Easy to Manage and Efficiency - Improve or enhance up network performance
 To define various VLAN groups that can help management to be more organized and reduce backbone server system load, so the performance is improved, for example, all RD Users set in same VLAN group, VOIP Voice set in another VLAN group.

Security - Improve or enhance up network security
 Isolate group, if one group to be hacked, VLAN prevents influence for the other isolated group.

AirLive SNMP-GSF12M supports VLAN function.
 Moreover, user can define policy for voice data in high priority, to ensure your voice data will not lag coursing by any networking jam.

Voice VLAN Configuration

Mode	Disabled
VLAN ID	1000
Aging Time	86400 seconds
Traffic Class	7 (High)

Port Configuration

Port	Mode	Security	Discovery Protocol
*	<>	<>	<>
1	Disabled	Disabled	OUI
2	Disabled	Disabled	OUI
3	Disabled	Disabled	OUI
4	Disabled	Disabled	OUI

Save Reset

Thermal Protection Configuration

Thermal protection is for detecting and protecting the working switch. When the switch detected the port temperature is higher that defined temperature, the system will disable the port, to protect switch itself.

This switch support 4 Thermal Protection priority groups, and each of them can have a defined temperature for protection.

Information & Status
 Network Admin
Port Configure
 Ports
 Aggregation
 Mirroring
 Thermal Protection
 Green Ethernet
 PoE
 Advanced Configure
 Security Configure
 QoS Configure
 Diagnostics
 Maintenance

Thermal Protection Configuration

Temperature settings for priority groups

Priority	Temperature
0	255 °C
1	255 °C
2	255 °C
3	255 °C

Port priorities

Port	Priority
*	<>
1	0
2	0
3	0

DHCP Snooping Support

Managing DHCP server; prevent stranger / Hacker.

DHCP Snooping Configuration

Snooping Mode Enabled

Port Mode Configuration

Port	Mode
*	<>
1	Trusted
2	Untrusted
3	Trusted
4	Trusted
5	Trusted
6	Untrusted
7	Trusted
8	Trusted
9	Trusted
10	Trusted

Model	AirLive SNMP-GSF12M
<p>Hardware</p> <ul style="list-style-type: none"> • Device Interface: 12 x Ports 1000 SFP 2 x 10/100/1000 RJ45 14-port totally 1 x RJ45 console port • Standard IEEE802.3u 100Base-TX / 100Base-FX IEEE802.3ab Gigabit 1000Base-T IEEE802.3ae 10GBase 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 IEEE802.3az Energy Efficient Ethernet • LED Indicators: PWR (power supply), SYS(System), Link (Network Indicator), Fiber (Indicator). • Lighting Surge Protection: 4KV 8/20us (general mode), • Mechanical Solid metal 19" 1U rack-mountable, IP30 <p>Power</p> <ul style="list-style-type: none"> • Power Input: AC100~240VAC, <p>Switch Architecture Performance</p> <ul style="list-style-type: none"> • Switching architecture: Store and Forward Switch Capacity: Back-plan up to 256Gbps (non-blocking) Forwarding Rate@64byte; 20.83Mpps MAC Address: 8K Buffer Memory: 6Mb Jumbo Frames: 9.6K • Fiber Medium: Multi-mode Fiber: 850nm (500m) Single-mode Fiber: 1310nm (0~40Km), 1550nm (0~120Km) <p>ERPS Ethernet Ring Protection</p> <ul style="list-style-type: none"> • Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring. The self-healing time of the ring network is less than 20ms 	<p>L2 Management Function</p> <ul style="list-style-type: none"> • Port Management: Enable / Disable Port Speed, Duplex, Flow-Control Port Information Check, Temperature protection setting • Port Mirroring: Support both side-way port mirroring • 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 • Port Aggregation: Support LACP Support Static Polymerization Support the largest 7 aggregation groups, each aggregation group supports 8 ports • VLAN: Support port based VLAN (4K), Support protocol based VLAN Support Access, Trunk, Hybrid three types of port configuration Support QinQ configuration Voice VLAN • MAC: Support static addition, deletion 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 • Multicast: Support IGMP-Snooping Support MLD-Snooping Support multicast VLAN Support the user's quick departure mechanism • DDM: Support SFP DDM • Layer 3 switching function: Support L2+ managed function, Static routing / default routing, 128 maximum entries ARP protocol, 1024 maximum entries

* Specification will be changed without prior notice



Model	AirLive SNMP-GSF12M
<p>L2+ Management Extension Function</p> <ul style="list-style-type: none"> • ACL (Access Control List): Support L2 to L4 packet filtering function. Based on source MAC, destination MAC, IP Protocol type, source IP, destination IP, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL Support ACL based on Port and VLAN • QoS: Diff-Serv QoS Each port supports 8 output queues Support 802.1p/DSCP priority mapping Support queue scheduling mechanism (SP, WRR, SP+WRR) Priority tag Mark/Remark Stream based packet filtering Support for stream-based redirection Support flow-based speed limit • User Settings: Support user grading management and password protection Log: User login, operation, status, events • Network diagnosis: Support Ping, Cable Diagnostics • 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 • SSH2.0: Support SSH remote management • Telnet: Support Telnet remote management • WEB: HTTPS • SNMP: SNMP V1/V2/V3 • RMON (remotely management) Support RMON1 Console/AUX Modem Support FTP, TFTP, Xmodem, SFTP file download management Support one bond reduction Support NTP clock Support system work log Support CPU instant utilization status view Support link layer discovery protocol LLDP Support NMS intelligent management center <p>System Management</p> <ul style="list-style-type: none"> Support DHCP Client Support DHCP Snooping Support DHCP Server Support DHCP Relay 	<p>Security Functions</p> <ul style="list-style-type: none"> Support IEEE802.1X authentication / centralized MAC address authentication Support AAA&RADIUS authentication Support the number of MAC address learning restrictions Support MAC address black hole Support SSH 2.0 to provide secure passwords for user login. Support SSL to ensure data transmission security Support port isolation Support the speed limit function of ARP message Support IP source address protection Support ARP intrusion detection function Support against DoS attacks Support port broadcast message suppression Support host data backup mechanism Binding capabilities of IP + MAC + VLAN + ports <p>Environment</p> <ul style="list-style-type: none"> • Operating Temperature: -20°C to +55°C • Storage Temperature: -40°C to +80°C • Working Humidity: 5%~95%, non-condensing • Storage Humidity: 5%~95%, non-condensing <p>Standard package of switch</p> <ul style="list-style-type: none"> • Switch size: 27 x 18.1 x 4.45 cm(L*W*H) • Package Weight: N.W: <1.5kgs; G.W: <2.0KGS • Package content: 1 x Switch, 1 x Power cord <p>Standard carton package</p> <ul style="list-style-type: none"> • Quantity: TBD pcs / 1 carton • Dimensions TBD cm • Weight TBD KGS <p>Ordering Information</p> <ul style="list-style-type: none"> • Model: SNMP-GSF12M • Name: SNMP L2+ Managed Multi Giga Fiber Switch, 14 Ports SFP including 12 x SFP, 2x RJ-45

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