

LMP-1600G-M12-67-24 Series

16-Port Industrial M12 IP67 Waterproof Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx M12 Connectors (X-Coded) (30W/Port); 24~55VDC Power Input







Features

- ► 16-Port 10/100/1000Base-T(X) Ethernet with IEEE 802.3af/at compliant (30W/Port)
- Multi-user account for security
- ► Bypass design for Daisy Chain Redundancy
- ► Configuration: http, https, CLI Command, Telnet, SNMP, SSH
- Network redundancy support: G.8032 ERPS v2 / STP / RSTP / MSTP
- Supports Static routes for routing function
- ► Supports RADIUS, TACACS+ authentication protocol
- Supports QoS, LACP bandwidth control
- Supports VLAN, SNMP v1/v2c/v3, ACL, IP source guard for Ethernet security
- ▶ PoE ping alarm function for PoE ports power recycle
- ► Redundant power inputs design
- ► Operating Temperature Range
 - STD: -10°C to 65°C, EOT: -40°C to 70°C
- 5-Year Warranty

INTRODUCTION

DIMENSIONS

Antaira Technologies' LMP-1600G-M12-67-24 Series is a 16-port managed gigabit Ethernet switch, which provides 16*10/100/1000 Base-T(X) with IEEE 802.3 af/at PoE compliant. LMP-1600G-M12-67-24 Series is full manageable light layer 3 Ethernet switch series and supports power inputs redundancy. LMP-1600G-M12-67-24 Series offers standardized network redundancy ITU-T G.8032 ERPS v2 (Ethernet Ring Protection Switch) protocol, providing <50ms recovery time to the network.

LMP-1600G-M12-67-24 Series provides comprehensive network security and management capability by supporting Multi-user account, IGMP, GVRP, VLAN, QoS, SNMP, RADIUS, TACACS+, Aggregation (Static, LACP), SSH, SSL, IP source guard to create a highly-secured network environment. For power saving purpose, assuring PD priority and enhancing security level of the network, LMP-1600G-M12-67-24 Series also supports PoE scheduling and PoE output limit function to set up PoE output duration and watt at will.

LMP-1600G-M12-67-24 Series is an M12 IP67 PoE+ industrial gigabit Ethernet switch that meets the high-reliability requirements demanded by industrial applications. Its M12 connectors ensure a tight and robust connection and it guarantees reliable operation on applications that are subject to high vibration and shock in dust, liquid or gas laden environments. Being able to operate under the standard temperature range from -10°C to 65°C or the extended temperature range from -40°C to 70°C, the LMP-1600G-M12-67-24 Series can be installed in almost any harsh environment.

Unit: mm (inch) 295(11.6) 280(11.0) 270(10.6) (C.9) (R.1) (

5.5(0.2)



SPECIFICATIONS

Technology	
L2 Switching	Port/MAC/Protocol/IP Subnet-based VLAN, GARP/GVRP, Loop Guard, Link Aggregation static/LACP, BPDU guard, Error disable recovery, IGMP snooping v2/v3, MLD snooping v1/v2, IGMP filtering, IPMC throttling / filtering leave proxy, DHCP snooping, G.8032 v1/v2
L3 Switching	DHCP option82, static routes
QoS	802.1p Queueing, Input priority mapping, Storm control for Unicast/Multicast/Broadcast, Port/Queue/ACL policer, Port egress shaper, Queue egress shaper, DiffServ (DSCP), Tag remarking, Scheduler mode
Power Saving	ActiPHY, PerfectReach, IEEE 802.3az EEE power management
Network Redundancy	STP/RSTP/MSTP, port trunk with LACP, ERPS v1/v2 (<50ms)
Configuration	Http, Https, Telnet, SSH, CLI, TFTP, SNMP v3
System / Diagnostics	Dual Image Protection, PING, PING6
Switch Properties	
Switch Architecture	Back-Plane (Switching Fabric): 32Gbps
Priority Queues	8
Processing Type	Store and forward IEEE 802.3x flow control, back pressure flow
Flow Control	control
Transfer Rate	14,880pps for Ethernet Port 148,800pps for Fast Ethernet Port 1,488,000pps for Gigabit Ethernet Port
Memory Buffer	4Mbits
Jumbo Frame	9.6Kbytes
MAC Table Size	32K
VLAN Group	4095
IGMP Group	1024
Port Interface	16*10/100/1000 Page T/V) 0 xix M10 V 0-1-1
Ethernet Port	16*10/100/1000 Base-T(X), 8-pin M12 X-Coded female connectors, auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
RS232 Serial	1*RS232 with M12 5-pin A-coded female
Console	connector
Configuration	1*USB 2.0 with M12 4-pin A-coded female
Backup	connector for configuration backup/restore 1* Digital Input (DI) with M12 5-Pin A-coded
DI	male connector: State 0: -30~8VDC / State 1: 10~30VDC, Max. input current: 8mA
Bypass Protection	Ethernet Port 8 and Port 16
LED Indicators	System: Power 1, Power 2, Master, Ring, Status, PoE Load PoE: On-connected to PD devices

Ethernet ports: Speed/Link/Active

Network Cable Contact	Protection	
Metal, IP67 protection	Network Cable	EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m) 1000Base-T: 4-pair UTP/STP Cat.5/5E
Dimensions 166.2 x 295 x 101.3 mm (W x H x D) Weight Unit: 9.06 lbs. Shipping: 10.66 lbs. Mounting Wall mounting Power Requirement Input Voltage Power Connection Relay Contact Overload Current Protection Reverse Polarity Protection PoE Pin Assignment PoE Power Budget System Power Consumption Environmental Limits Operating Temperature Ambient Relative Humidity Regulatory Approvals EMI Free Fall IEC60068-2-32 Shock IEC60068-2-27 Vibration Vall mounting Vall mounting Dual DC power inputs through M12 5-pin K-coded male connector 24VDC, 1A resistive Present Present Present Present Present Present Present Present Present PoE Power Budget 240W 28W 28W STD: -10°C to 65°C EOT: -40°C to 70°C Storage Temperature Ambient Relative Humidity Regulatory Approvals EMI FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A CE EN55035/(EN61000-6-2: IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-27 Vibration IEC60068-2-6 Green RoHS Compliant	Mechanical Charac	cteristics
Weight Shipping: 10.66 lbs. Mounting Wall mounting Power Requirement Input Voltage 24~55VDC Redundant Input Power Connection Dual DC power inputs through M12 5-pin K-coded male connector Relay Contact 24VDC, 1A resistive Overload Current Protection Present Present Present Present Present PoE Pin V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A) PoE Power Budget 240W System Power Consumption Environmental Limits Operating STD: -10°C to 65°C Temperature EOT: -40°C to 70°C Storage Temperature Ambient Relative Humidity Regulatory Approvals EMI FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A CE EN55032/EN61000-6-4 Class A CE EN55032/EN61000-6-2: IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-6 Green RoHS Compliant	Housing	Metal, IP67 protection
Mounting Wall mounting Power Requirement Input Voltage 24~55VDC Redundant Input Power Connection Dual DC power inputs through M12 5-pin K-coded male connector Relay Contact 24VDC, 1A resistive Present Present Present Present Present Present Present Poe Pin V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A) Poe Power Budget 240W System Power Consumption Environmental Limits Operating STD: -10°C to 65°C Temperature EOT: -40°C to 70°C Storage Temperature Ambient Relative Humidity Regulatory Approvals EMI FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A CE EN55032/EN61000-6-2: IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-6 Green RoHS Compliant	Dimensions	166.2 x 295 x 101.3 mm (W x H x D)
Power Requirement Input Voltage	Weight	Shipping: 10.66 lbs.
Input Voltage 24~55VDC Redundant Input	Mounting	Wall mounting
Power ConnectionDual DC power inputs through M12 5-pin K-coded male connectorRelay Contact24VDC, 1A resistiveOverload Current ProtectionPresentReverse Polarity ProtectionPresentPoE Pin Assignment Mode A)V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A)PoE Power Budget 240W28WSystem Power ConsumptionSTD: -10°C to 65°CTemperature EOT: -40°C to 70°CStorage Temperature Ambient Relative Humidity5% to 95%, (non-condensing)Regulatory ApprovalsEMIFCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class ACE EN55035/EN61000-6-2: IEC61000-4-2,3,4,5,6,8Free Fall IEC60068-2-32Shock IEC60068-2-6Green RoHS Compliant	Power Requirement	
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Protection Present PoE Pin Assignment V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A) PoE Power Budget System Power Consumption 240W Environmental Limits 28W Operating Temperature STD: -10°C to 65°C Storage Temperature -40°C to 70°C Ambient Relative Humidity 5% to 95%, (non-condensing) Regulatory Approvals FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A EMS CE EN55032/EN61000-6-2: IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-27 Vibration IEC60068-2-6 Green RoHS Compliant	Protection	Present
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System Power Consumption 28W Environmental Limits Operating STD: -10°C to 65°C Temperature EOT: -40°C to 70°C Storage Temperature -40°C to 85°C Ambient Relative Humidity 5% to 95%, (non-condensing) Regulatory Approvals EMI FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A CE EN55035/EN61000-6-2: IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-27 Vibration IEC60068-2-6 Green RoHS Compliant		
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Temperature EOT: -40°C to 70°C Storage -40°C to 85°C Temperature 5% to 95%, (non-condensing) Regulatory Approvals FCC Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A EMI CE EN55035/EN61000-6-2 Class A EMS IEC61000-4-2,3,4,5,6,8 Free Fall IEC60068-2-32 Shock IEC60068-2-27 Vibration IEC60068-2-6 Green RoHS Compliant	Environmental Lim	nits
Temperature		
Humidity 5% to 95%, (non-condensing)	Temperature	-40°C to 85°C
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CE EN55032/EN61000-6-4 Class A CE EN55035/EN61000-6-2:		
IEC61000-4-2,3,4,5,6,8 Free Fall	ЕМІ	CE EN55032/EN61000-6-4 Class A
Shock IEC60068-2-27 Vibration IEC60068-2-6 Green RoHS Compliant		IEC61000-4-2,3,4,5,6,8
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Green RoHS Compliant		
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Warranty 5 Years		•
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ORDERING INFO

LMP-1600G-M12-67-24 16-Port Industrial M12 IP67 Waterproof Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx M12 Connectors (X-Coded) (30W/Port), 24-55VDC Power Input, STD: -10°C to 65°C

LMP-1600G-M12-67-24-T

16-Port Industrial M12 IP67 Waterproof Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx M12 Connectors (X-Coded) (30W/Port), 24-55VDC Power Input, EOT: -40°C to 70°C





Optional Accessories	
CB-M12A5PF-5M	M12 A Code 5P Female to open wire, 5 Meter, Wire: 22 AWG, DI/DO Cable
CB-M12A4PM-USB-5M	M12 A Code 4P Male to USB 2.0 Type-A Female, 5 Meter, Wire: 28 AWG, USB Cable
CB-M12X8PM-RJ45-5M	M12 X Code 8P Male to RJ-45 Socket, 5 Meter, Wire: 26 AWG, Ethernet Cable
CB-M12K5PF-5M	M12 K Code 5P Female to open wire, 5 Meter, Wire: 14 AWG, Power Cable
CB-M12A5PM-DB9-5M	M12 A Code 5P Male to DB9 Female, 5 Meter, Wire: 24 AWG, Console Cable