

LMP-1600G Series

16-Port Industrial Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx (30W/Port)



Features

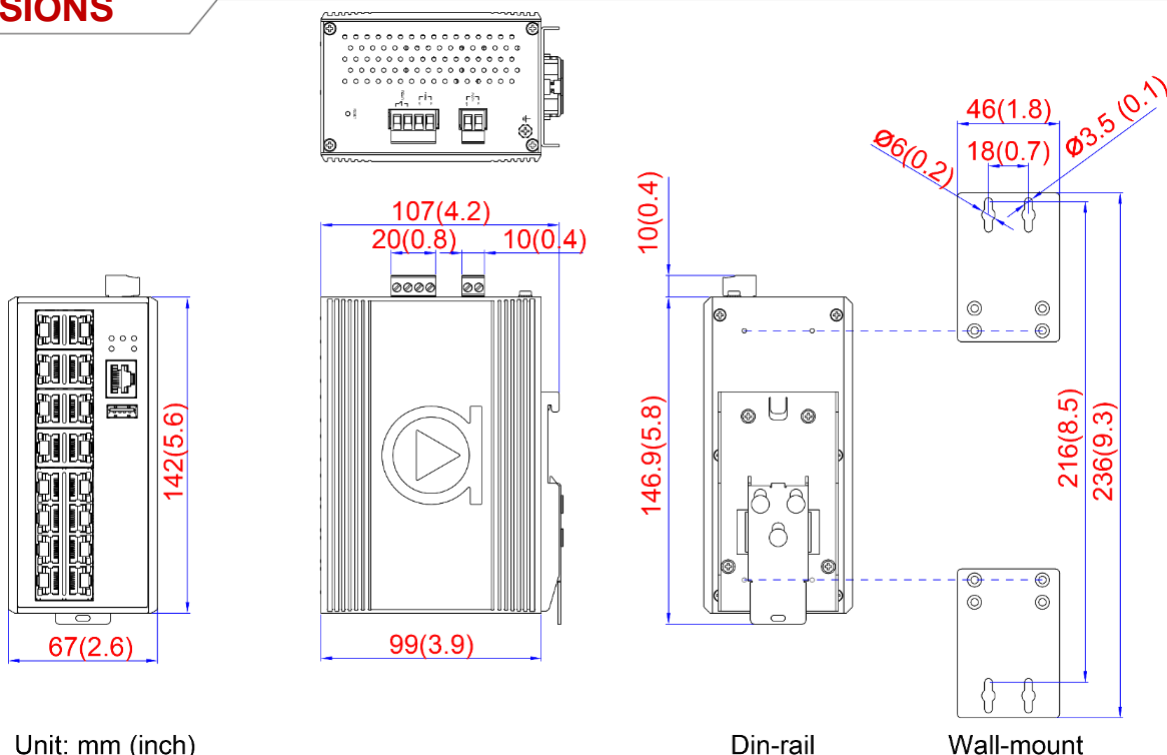
- ▶ Supports 16*10/100/1000Tx Gigabit Ethernet with IEEE 802.3af/at Compliant PoE+
- ▶ Network Redundancy: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
- ▶ Supports IPv4/IPv6, and DHCP Option 66/67/82
- ▶ Supports Modbus/TCP Protocol for Device Management and Monitoring
- ▶ IGMP v1/v2/v3 for Multicast Traffic Filtering
- ▶ System Warning Setting for Automatic Warning
- ▶ QoS (IEEE802.1p/1Q), CoS/ToS to Increase Determinism
- ▶ IEEE802.1Q VLAN for Easy Network Planning
- ▶ Enhanced Network Security with IEEE802.1X, SNMP v1/v2c/v3, HTTPS, and SSH/SSL
- ▶ Operating Temperature Range: STD: -10°C to 70°C, EOT: -40°C to 75°C
- ▶ 5-Year Warranty

INTRODUCTION

Antaira Technologies' LMP-1600G series is a 16-port industrial Gigabit PoE+ managed Ethernet switch that is embedded with 16*10/100/1000Tx Ethernet ports that support IEEE 802.3af/at for a maximum of 30W/port. The LMP-1600G series is a fully manageable light layer 3 Ethernet switch that is pre-loaded with a user-friendly web management console design. It supports the ring network redundancy function using the market's open standard ITU-T G.8032 ERPS (Ethernet Ring Protection Switch) protocol that has a <50ms network recovery time. The advanced network filtering and security functions, such as, IGMP, VLAN, QoS, SNMP, port lock, RMON, Modbus TCP, and 802.1X/HTTPS/SSH/SSL increase determinism and improve network management for remote SCADA systems or control networks.

The LMP-1600G series is IP30 rated and DIN-rail mountable. There are also two wide operating temperature models for either a standard temperature range (STD: -10°C to 70°C) or an extended temperature range (EOT: -40°C to 75°C). It also provides high EFT and ESD protection for industrial networking applications, such as, power/utility, water wastewater, oil/gas/mining, factory automation, security surveillance within transportation, ITS and any other outdoor or harsh environment.

DIMENSIONS



SPECIFICATIONS

Technology	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
L2 Switching	
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): 32.0Gbps IPv4/IPv6, SNMP v1/v2c/v3, LLDP, LLDP-MED, HTTP, HTTPS, SSHv2 telnet, DHCP client, DHCPv6 client, DHCP server, Port Mirror, DNS client/proxy, IP based Access Filter, ICMPv6, syslog, Time Zone / Daylight Saving, NTP client, RMON, sFlow, Loop detection, Console Port, Power Lost Warning, Relay Trigger
Protocols	
Processing Type	Store and Forward
Flow Control	IEEE 802.3x for full duplex mode, back pressure for half duplex mode
Transfer Rate	14,880pps for 10Base-T Ethernet 148,800pps for 100Base-T Fast Ethernet 1,488,000pps for Gigabit Ethernet
Packet Buffer	4Mbits
Jumbo Frame	9.6Kbytes
MAC Table Size	8K
VLAN Group	4095
IGMP Group	1024
Port Interface	
Ethernet Port	16*10/100/1000BaseTx (30W/Port) Auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)
RS232 Serial Console	1*RS232 in RJ45 connector with console cable, 115.2Kbps, 8, N, 1
Configuration Backup	1*USB 2.0

Protection	
Overload Current Protection	Present
Power Reverse Polarity	Present (the unit will not be on, if power reverse)
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable; EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable; EIA/TIA-568 100-ohm (100m) 1000Base-TX: 4-pair UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m)
Mechanical Characteristics	
Housing	Metal, IP30 rated
Dimension	67 x 142 x 99 mm (W x H x D)
Weight	Unit: 2.65 lbs Shipping: 3.09 lbs
Mounting	DIN-Rail mounting; Wall mounting
Power Requirement	
Input Voltage	48~55VDC Redundant Input
Power Connection	1 removable 4-contact and 2-contact terminal block
System Power Consumption	13.8 Watts
PoE Power Budget	240Watts
Relay Contact	24VDC, 1A resistive
Environmental Limits	
Operating Temperature	STD: -10° to 70°C EOT: -40° to 75°C
Storage Temperature	-40°~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
EMS	CE EN55035/EN61000-6-2 EN61000-4-2,3,4,5,6,8
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
Certifications	FCC, CE, UL 61010-1, 61010-2-201
Substation	IEC 61850-3 Edition 2.0
Warranty	5 Years

ORDERING INFO

LMP-1600G	16-Port Industrial Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/Port)
LMP-1600G-T	16-Port Industrial Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/port); EOT: -40°C to 75°C