

# LMP-1600G Series

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



## Features

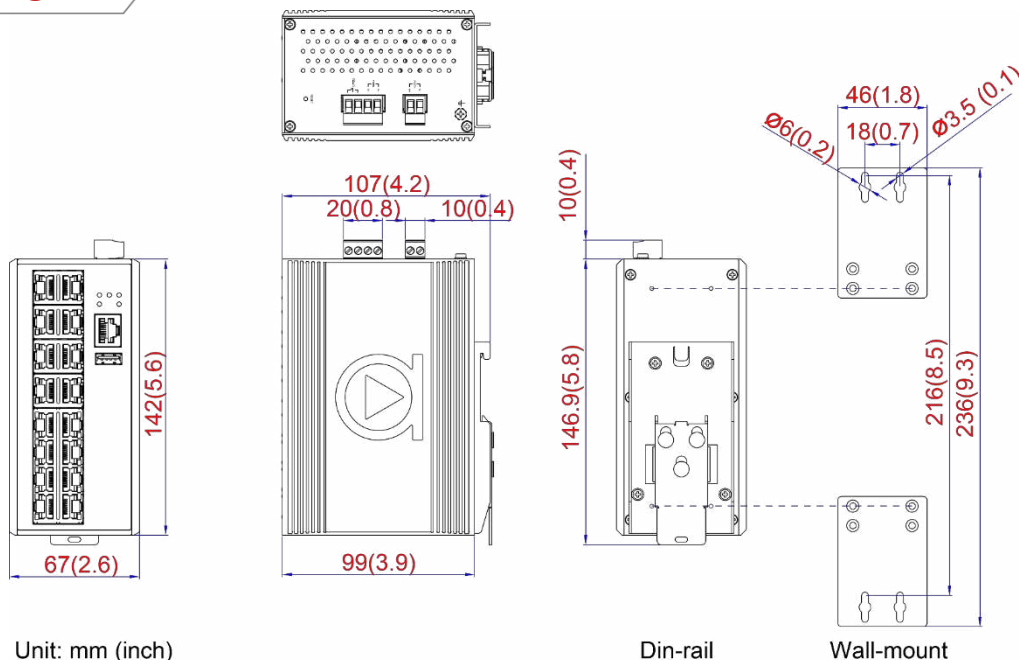
- ▶ Supports 16\*10/100/1000Tx Gigabit Ethernet with IEEE 802.3af/at Compliant PoE+
- ▶ Network Redundancy: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
- ▶ Supports IPv4/IPv6, and DHCP Option 66/67/82
- ▶ Supports Modbus/TCP Protocol for Device Management and Monitoring
- ▶ IGMP v1/v2 for Multicast Traffic Filtering
- ▶ System Warning Setting for Automatic Warning through E-mail
- ▶ 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
- ▶ Auto Warning by Exception through E-mail, Relay Output
- ▶ 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

<b>Technology</b>	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
<b>L2 Switching</b>	
<b>L3 Switching</b>	DHCP option82, static routes
<b>QoS</b>	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
<b>Power Saving</b>	ActiPHY, PerfectReach, IEEE 802.3az EEE power management
<b>Network Redundancy</b>	STP/RSTP/MSTP, port trunk with LACP, ERPS v1/v2 (<50ms)
<b>Configuration</b>	Http, Https, Telnet, SSH, CLI, TFTP, SNMP v3
<b>System / Diagnostics</b>	Dual Image Protection, PING, PING6
<b>Switch Properties</b>	
<b>Switch Architecture</b>	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
<b>Protocols</b>	
<b>Processing Type</b>	Store and Forward
<b>Flow Control</b>	IEEE 802.3x for full duplex mode, back pressure for half duplex mode
<b>Transfer Rate</b>	14,880pps for 10Base-T Ethernet 148,800pps for 100Base-T Fast Ethernet 1,488,000pps for Gigabit Ethernet
<b>Packet Buffer</b>	4Mbits
<b>Jumbo Frame</b>	9.6Kbytes
<b>MAC Table Size</b>	8K
<b>VLAN Group</b>	4095
<b>IGMP Group</b>	1024
<b>Port Interface</b>	
<b>Ethernet Port</b>	16*10/100BaseTx (30W/Port) Auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
<b>PoE Pin Out</b>	V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)
<b>RS232 Serial Console</b>	1*RS232 in RJ45 connector with console cable, 115.2Kbps, 8, N, 1
<b>Configuration Backup</b>	1*USB 2.0

<b>Protection</b>	
<b>Overload Current Protection</b>	Present
<b>Power Reverse Polarity</b>	Present (the unit will not be on, if power reverse)
<b>Network Cable</b>	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/E cable; EIA/TIA-568 100-ohm (100m)
<b>Mechanical Characteristics</b>	
<b>Housing</b>	Metal, IP30 rated
<b>Dimension</b>	67 x 142 x 99 mm (W x H x D)
<b>Weight</b>	Unit: 2.65 lbs Shipping: 3.09 lbs
<b>Mounting</b>	DIN-Rail mounting; Wall mounting
<b>Power Requirement</b>	
<b>Input Voltage</b>	48~55VDC Redundant Input
<b>Power Connection</b>	1 removable 4-contact and 2-contact terminal block
<b>System Power Consumption</b>	13.8 Watts
<b>PoE Power Budget</b>	240Watts
<b>Relay Contact</b>	24VDC, 1A resistive
<b>Environmental Limits</b>	
<b>Operating Temperature</b>	STD: -10° to 70°C EOT: -40° to 75°C
<b>Storage Temperature</b>	-40°~85°C
<b>Ambient Relative Humidity</b>	5 to 95%, (non-condensing)
<b>Regulatory Approvals</b>	
<b>EMI</b>	FCC Class A CE EN55032/EN61000-6-4 Class A
<b>EMS</b>	CE EN55035/EN61000-6-2 Class A EN61000-4-2,3,4,5,6,8
<b>Free Fall</b>	IEC60068-2-32
<b>Shock</b>	IEC60068-2-27
<b>Vibration</b>	IEC60068-2-6
<b>Green</b>	RoHS Compliant
<b>Certifications</b>	FCC, CE, UL 61010-1, 61010-2-201
<b>Warranty</b>	5 Years

## ORDERING INFO

<b>LMP-1600G</b>	16-Port Industrial Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/Port)
<b>LMP-1600G-T</b>	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