LMP-1600G Series

16-Port Industrial Gigabit PoE+ Managed Ethernet Switch, with 16*10/100/1000Tx (30W/Port); 48~55VDC Power Input

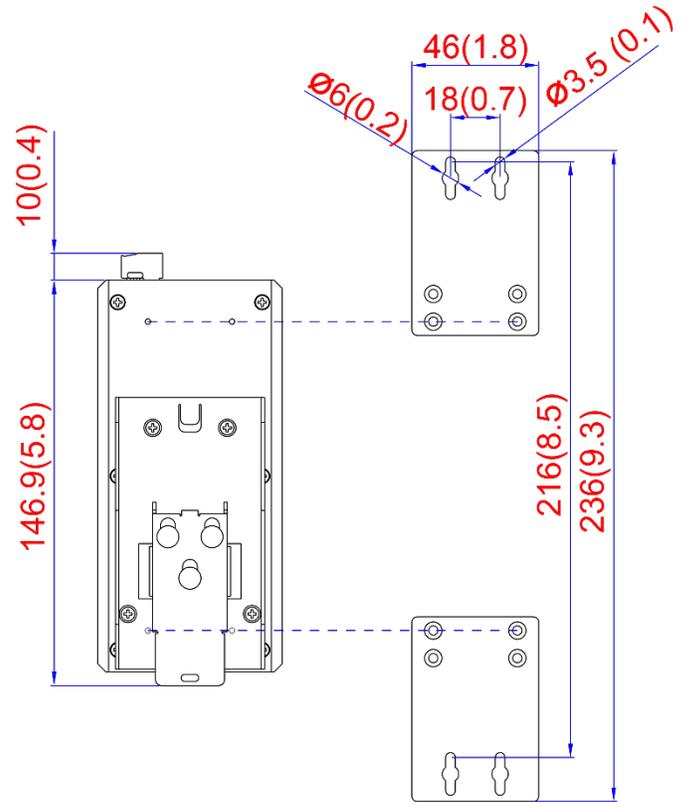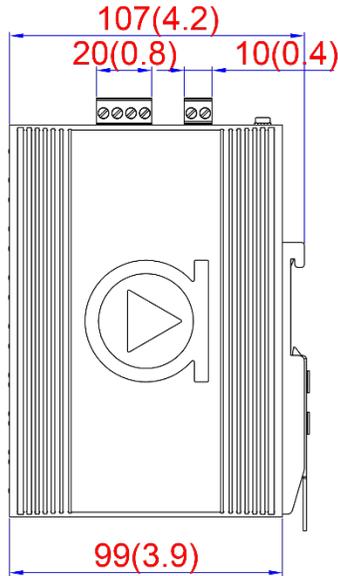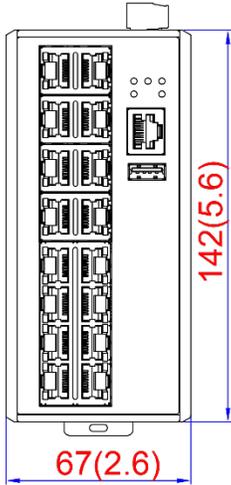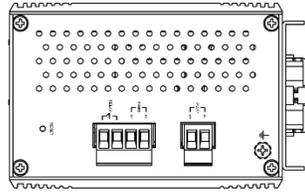## Features

► Supports 16*10/100/1000Tx Gigabit Ethernet with IEEE 802.3at 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° to 70°C, EOT: -40° 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 802.3at/af for a maximum of 30W/port. The LMP-1600G series is a fully manageable 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

Unit: mm (inch)

107(4.2)
20(0.8)   10(0.4)
142(5.6)
67(2.6)
99(3.9)

10(0.4)
146.9(5.8)

Din-rail

46(1.8)
Ø6(0.2)   18(0.7)   Ø3.5 (0.1)
216(8.5)
236(9.3)

Wall-mount

SPECIFICATIONS

Technology

Standards	IEEE 802.3 10Tx Ethernet IEEE 802.3u 100Tx Fast Ethernet IEEE 802.3ab 1000Tx Gigabit Ethernet IEEE 802.3z Gigabit Fiber IEEE 802.3x Flow Control for Full Duplex IEEE 802.3ad for Port Trunk with LACP IEEE 802.1d STP (Spanning Tree Protocol) IEEE 802.1w RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s MSTP (Multiple Spanning Tree Protocol) ITU-T G.8032/Y.1344 ERPS (Ethernet Ring Protection Switch) Protocol IEEE 802.1Q for VLAN Tagging IEEE 802.1x for Network Authentication IEEE 802.1p QoS/CoS Protocol for Traffic Prioritization

Switch Properties

Protocol	IGMPv1/v2, SNMPv1/v2c/v3, TFTP, SNTP, SMTP, RMON, HTTP, HTTPS, Telnet, Syslog, DHCP Option 66/67/82, SSH/SSL, Modbus/TCP, LLDP, IPv4/IPv6
Switch Architecture	Back-Plane (Switching Fabric): 24.0Gbps
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	4 Mbits
Jumbo Frame	9.6K
MAC Table Size	8K
VLAN Group	0 ~ 4094
IGMP Group	Up to 256 Group

Port Interface

Ethernet Port	16*10/100BaseTx auto negotiation speed, Full/Half duplex mode, and auto MDI 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; 100Base-TX: 2-pair UTP/STP Cat. 5 cable. EIA/TIA- 568 100-ohm (100m) 1000BaseTX: UTP/STP Cat.5/5E cable; EIA/TIA568 100-ohm (100m)

Mechanical Characteristics

Housing	Metal, IP30 rated
Dimension	67 x 142 x 99 mm
Weight	Unit: 2.65 lbs Shipping: 3.09 lbs
Mounting	DIN-Rail; Wall-mount (optional)

Power Requirement

Input Voltage	48~55VDC Redundant Input
Power Connection	1 removable 4-contact and 2-contact terminal block
Power Consumption	15 Watts
PoE Power Output	30Watts max. per PoE port
Max. 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 Class A
EMS	EN61000-4-2,3,4,5,6,8 EN61000-6-2,4
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
Certifications	FCC, CE, UL 61010-1 (Pending), UL 61010-2-201 (Pending)
Warranty	5 Years

ORDERING INFO

LMP-1600G	16-Port Industrial Gigabit PoE+ Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/Port); 48~55VDC Power Input
LMP-1600G-T	16-Port Industrial Gigabit PoE+ Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/port); 48~55VDC Power Input; EOT: -40°C to 75°C