

# LMX-1600G Series

16-Port Industrial Gigabit Managed Ethernet Switch, with 16\*10/100/1000Tx Ports; 12~48VDC Power Input



## Features

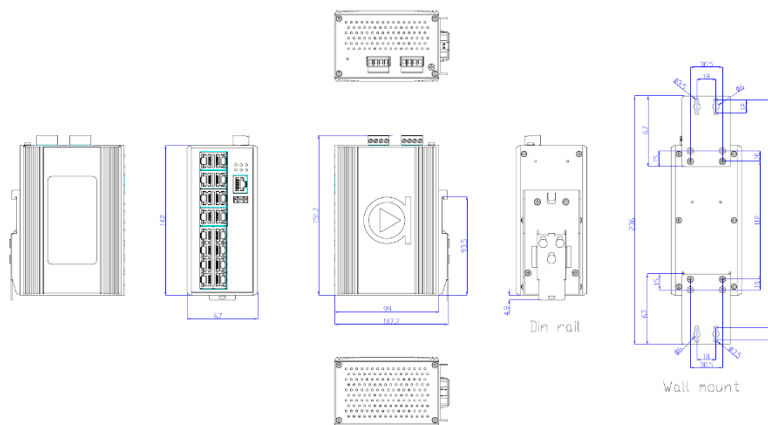
- ▶ Supports 16\*10/100/1000Tx RJ45 Ports
- ▶ Network Redundancy: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
- ▶ Supports IPv4/IPv6, and DHCP Option 66/67/82
- ▶ Supports Modbus/TCP Protocol for Device Management and Monitoring
- ▶ IGMP v1/v2 for Multicast Traffic Filtering
- ▶ System Warning 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' LMX-1600G series** is a 16-port industrial Gigabit managed Ethernet switch that is embedded with 16\*10/100/1000Tx Ethernet ports. The LMX-1600G series is a fully manageable Layer 2 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 LMX-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>		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
<b>Standards</b>		
<b>Switch Properties</b>		
<b>Protocol</b>	IGMPv1/v2, SNMPv1/v2c/v3, TFTP, SNMP, SMTP, RMON, HTTP, HTTPS, Telnet, Syslog, DHCP Option 66/67/82, SSH/SSL, Modbus/TCP, LLDP, IPv4/IPv6	
<b>Switch Architecture</b>	Back-Plane (Switching Fabric): 24.0Gbps	
<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>	4 Mbits	
<b>Jumbo Frame</b>	9.6K	
<b>MAC Table Size</b>	8K	
<b>VLAN Group</b>	0 ~ 4094	
<b>IGMP Group</b>	Up to 256 Group	
<b>Port Interface</b>		
<b>Ethernet Port</b>	16*10/100BaseTx auto negotiation speed, Full/Half duplex mode, and auto MDI connection	
<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; 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)
<b>Mechanical Characteristics</b>		
<b>LED Indicators</b>	Per Unit: Power 1 & 2 (Green), Fault (Red)	
<b>Housing</b>	Metal, IP30 rated	
<b>Dimension</b>	54 x 142 x 99 mm (TBA)	
<b>Weight</b>	Unit: 2.5 lbs (TBA) Shipping: 3.0 lbs (TBA)	
<b>Mounting</b>	DIN-Rail; Wall-mount (optional)	
<b>Power Requirement</b>		
<b>Input Voltage</b>	12~48VDC Redundant Input	
<b>Power Connection</b>	1 removable 6-contact terminal block	
<b>Power Consumption</b>	15 Watts(TBD)	
<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 (pending) EN61000-4-2,3,4,5,6,8 EN61000-6-2,4 (pending)	
<b>EMS</b>	IEC60068-2-32 (pending)	
<b>Free Fall Shock</b>	IEC60068-2-27 (pending)	
<b>Vibration</b>	IEC60068-2-6 (pending)	
<b>Green</b>	RoHS Compliant	
<b>Certifications</b>	FCC, CE, UL 61010-1 (Pending), UL 61010-2-201 (Pending)	
<b>Warranty</b>	5 Years	

## ORDERING INFO

<b>LMX-1600G</b>	16-Port Industrial Gigabit Managed Ethernet Switch, with 16*10/100/1000Tx Ports; 12~48VDC Power Input
<b>LMX-1600G-T</b>	16-Port Industrial Gigabit Managed Ethernet Switch, with 16*10/100/1000Tx Ports; 12~48VDC Power Input; EOT: -40°C to 75°C

### Optional Accessories

<b>MDR-20-24</b>	20Watt Industrial Slim Single Output DIN-Rail Power Supply – 24VDC / 1.00 Amp
<b>MDR-40-48</b>	40Watt Industrial Slim Single Output DIN-Rail Power Supply – 48VDC / 0.83 Amp
<b>DR-75-48</b>	75Watt Industrial Single Output DIN-Rail Power Supply – 48VDC / 1.6 Amp
<b>DIN-RACK-2U</b>	DIN-Rail to 19" Rack Mount Adapter for all DIN-Rail Mountable Products, 2U Height