

# LMX-2012G-SFP Series

20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 8\*10/100/1000Tx and 12\*100/1000 SFP Slots



## Features

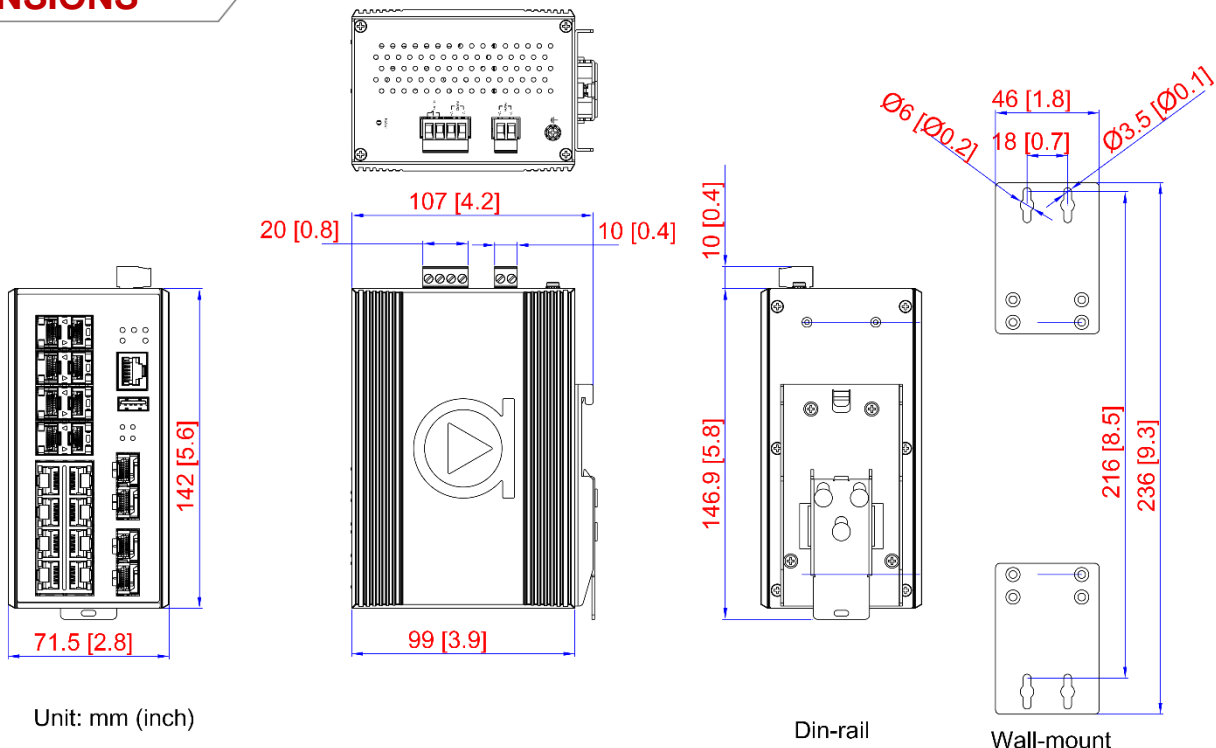
- ▶ Supports 8\*10/100/1000Tx Gigabit Ethernet and 12\*100/1000 SFP Slots
- ▶ Network Redundancy Support: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
- ▶ Supports IPv4/IPv6, and DHCP Option 66/67/82
- ▶ Supports Modbus/TCP Protocol for Device Management and Monitoring
- ▶ IGMP v1/v2/v3 for Multicast Traffic Filtering
- ▶ QoS (IEEE 802.1p/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 Relay Output
- ▶ Operating Temperature Range
  - STD: -10°C to 65°C, EOT: -40°C to 75°C
- ▶ 5-Year Warranty

## INTRODUCTION

Antaira Technologies' **LMX-2012G-SFP series** is a 20-port industrial Gigabit managed Ethernet switch that is embedded with 8\*10/100/1000Tx Ethernet ports and 12\*100/1000 SFP slots. The LMX-2012G-SFP 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 LMX-2012G-SFP 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 65°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>                       | DHCP option82, static routes  |
| <b>L3 Switching</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>QoS</b>                                | ActiPHY, PerfectReach, IEEE 802.3az EEE power management  |
| <b>Power Saving</b>                       | STP/RSTP/MSTP, port trunk with LACP, ERPS v1/v2 (<50ms)   |
| <b>Network Redundancy</b>                 | Http, Https, Telnet, SSH, CLI, TFTP, SNMP v3  |
| <b>Configuration System / Diagnostics</b> | Dual Image Protection, PING, PING6  |
| <b>Switch Properties</b>                  |   |
| <b>Switch Architecture</b>                | Back-Plane (Switching Fabric): 40.0Gbps 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>                          | 8   |
| <b>Priority Queues</b>                    | Store and Forward   |
| <b>Processing Type</b>                    | IEEE 802.3x for full duplex mode, back pressure for half duplex mode  |
| <b>Flow Control</b>                       | 14,880pps for Ethernet Port   |
| <b>Transfer Rate</b>                      | 148,800pps for Fast Ethernet Port<br>1,488,000pps for Gigabit Ethernet Port   |
| <b>Memory 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>                      | 8*10/100/1000BaseTx<br>Auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection   |
| <b>SFP Port</b>                           | 12*100/1000 SFP Slots   |
| <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>LED Indicators</b>                     | System: Power 1, Power 2, Status, Master, Ring<br>Ethernet: Speed/Link/Active<br>SFP: Link/Active   |

|                                    |   |
|------------------------------------|---|
| <b>Protection</b>                  | 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable<br>EIA/TIA-568 100-ohm (100m)   |
| <b>Network Cable</b>               | 100Base-TX: 2-pair UTP/STP Cat. 5 cable<br>EIA/TIA-568 100-ohm (100m)<br>1000Base-TX: 4-pair UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m) |
| <b>Mechanical Characteristics</b>  |   |
| <b>Housing</b>                     | Metal, IP30 rated   |
| <b>Dimensions</b>                  | 71.5 x 142 x 99 mm (W x H x D)  |
| <b>Weight</b>                      | Unit: 3.4 lbs<br>Shipping: 4.18 lbs   |
| <b>Mounting</b>                    | DIN-Rail mounting, Wall mounting  |
| <b>Power Requirement</b>           |   |
| <b>Input Voltage</b>               | 12~48VDC Redundant Input  |
| <b>Power Connection</b>            | 1 removable 4-contact terminal block and 1 removable 2-contact terminal block   |
| <b>Relay Contact</b>               | 24VDC, 1A resistive   |
| <b>Overload Current Protection</b> | Present (Slow-Blown Fuse)   |
| <b>Reverse Polarity Protection</b> | Present   |
| <b>System Power Consumption</b>    | 19W   |
| <b>Environmental Limits</b>        |   |
| <b>Operating Temperature</b>       | STD: -10°C to 65°C<br>EOT: -40°C to 75°C  |
| <b>Storage Temperature</b>         | -40°C to 85°C   |
| <b>Ambient Relative Humidity</b>   | 5% to 95%, (non-condensing)   |
| <b>Regulatory Approvals</b>        |   |
| <b>EMI</b>                         | FCC Part 15 Subpart B Class A,<br>CE EN55032/EN61000-6-4 Class A  |
| <b>EMS</b>                         | CE EN55035/EN61000-6-2:<br>IEC61000-4-2,3,4,5,6,8   |
| <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, UL 61010-2-201   |
| <b>Warranty</b>                    | 5 Years   |

## ORDERING INFO

|                        |  |
|------------------------|--|
| <b>LMX-2012G-SFP</b>   | 20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 8*10/100/1000Tx Ports and 12*100/1000 SFP Slots                     |
| <b>LMX-2012G-SFP-T</b> | 20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 8*10/100/1000Tx Ports and 12*100/1000 SFP Slots; EOT: -40°C to 75°C |