# LMP-2004G-SFP Series

20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx (30W/Port) and 4*100/1000 SFP Slots

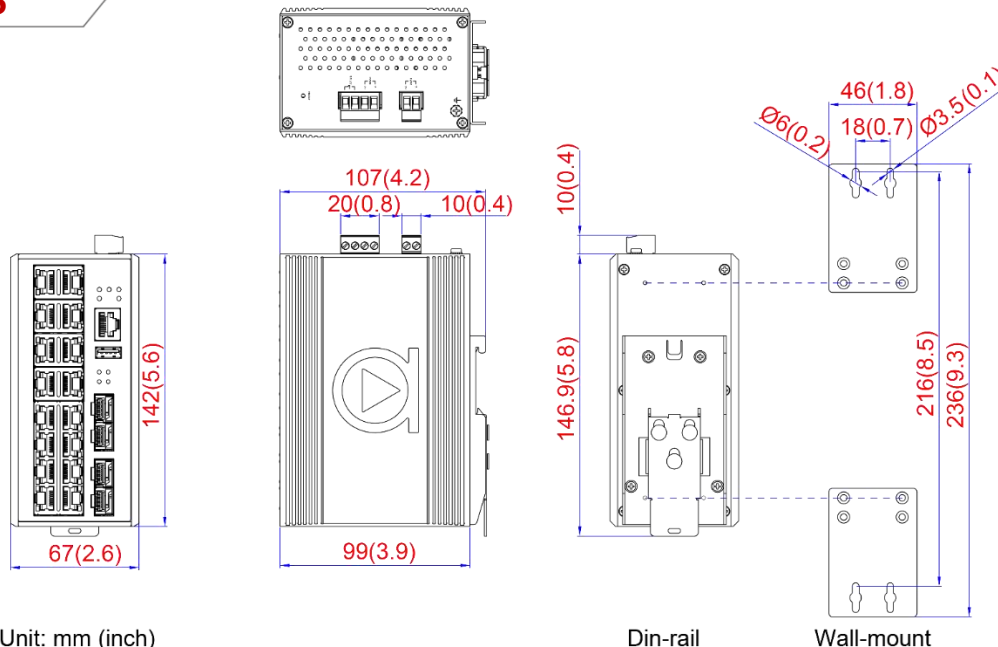## Features

► **Supports 16*10/100/1000Tx Gigabit Ethernet with IEEE 802.3af/at Compliant PoE+**

► **Supports 4*100/1000 SFP Slots**

► **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-2004G-SFP series** is a 20-port industrial Gigabit managed Ethernet switch that is embedded with 16*10/100/1000Tx Ethernet ports that support IEEE 802.af/at for a maximum of 30W/port and 4*100/1000 SFP slots. The LMP-2004G-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 LMP-2004G-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 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)

Din-rail          Wall-mount

# SPECIFICATIONS

## Technology

| | |
|---|---|
| **L2 Switching** | 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 |
| **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

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|---|---|
| **Switch Architecture** | Back-Plane (Switching Fabric): 40.0Gbps |
| **Protocols** | 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 |
| **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

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|---|---|
| **Ethernet Port** | 16*10/100/1000BaseTx (30W/Port) Auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection |
| **Fiber Port** | 4*100/1000 SFP Slots |
| **Wavelength** | Depends on SFP modules |
| **RS232 Serial Console** | 1*RS232 in RJ45 connector with console cable, 115.2Kbps, 8, N, 1 |
| **Configuration Backup** | 1*USB 2.0 |

## Protection

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|---|---|
| **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) 1000BaseTX: 4-pair UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m) |

## Mechanical Characteristics

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|---|---|
| **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

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|---|---|
| **Input Voltage** | 48~55VDC Redundant Input |
| **Power Connection** | 1 removable 4-contact and 2-contact terminal block |
| **PoE Pin Out** | V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A) |
| **System Power Consumption** | 18.4 Watts |
| **PoE Power Budget** | 240Watts |
| **Relay Contact** | 24VDC, 1A resistive |

## Environmental Limits

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|---|---|
| **Operating Temperature** | STD: -10°C to 70°C EOT: -40°C to 75°C |
| **Storage Temperature** | -40°~85°C |
| **Ambient Relative Humidity** | 5 to 95%, (non-condensing) |

## Regulatory Approvals

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|---|---|
| **EMI** | FCC Class A CE EN55032/EN61000-6-4 Class A |
| **EMS** | CE EN55035/EN61000-6-2 Class A 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 |
| **Warranty** | 5 Years |

# ORDERING INFO

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|---|---|
| **LMP-2004G-SFP** | 20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/Port) and 4*100/1000 SFP Slots |
| **LMP-2004G-SFP-T** | 20-Port Industrial Gigabit Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx Ports (30W/Port) and 4*100/1000 SFP Slots; EOT: -40°C to 75°C |