## antaira®

# LMX-0802 Series

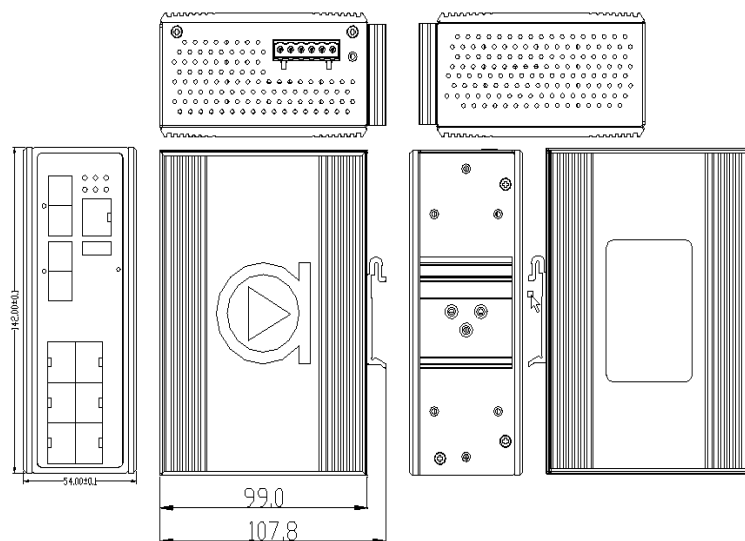**8-Port Industrial Managed Ethernet Switches, w/6*10/100Tx, 2*100Fx, 12~48VDC Power Input**

## Features

▶ Supports 6*10/100Tx and 2*100Fx (SC/ST Connectors in Multi or Single Mode Fiber)
▶ 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
▶ Configuration: Web Console, Telnet, CLI Command
▶ 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 Temp –STD: -10~70°C, EOT: -40~75°C
▶ 5-Year Warranty

## INTRODUCTION

**Antaira Technologies' LMX-0802 series** is an 8-port industrial managed Ethernet switch that is embedded with 6*10/100Tx Ethernet ports and 2*100Fx fiber ports that support SC or ST connections in either Single or Multi-Mode fiber. The LMX-0802 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-0802 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

### Technology

| | |
|---|---|
| **Standards** | IEEE 802.3 10Tx Ethernet<br>IEEE 802.3u 100Tx Fast Ethernet<br>IEEE 802.3x Flow Control for Full Duplex<br>IEEE 802.3ad for Port Trunk with LACP<br>IEEE 802.1d STP (Spanning Tree Protocol)<br>IEEE 802.1w RSTP (Rapid Spanning Tree Protocol)<br>IEEE 802.1s MSTP (Multiple Spanning Tree Protocol)<br>ITU-T G.8032/Y.1344 ERPS (Ethernet Ring Protection Switch) Protocol<br>IEEE 802.1Q for VLAN Tagging<br>IEEE 802.1x for Network Authentication<br>IEEE 802.1p QoS/CoS Protocol for Traffic Prioritization |
| **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, NAT, DHCP per port, SMTP, Quick ERPS, TLS |

### Switch Properties

| | |
|---|---|
| **Configuration** | Web Console, Telnet, CLI |
| **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<br>148,800pps for 100Base-T Fast Ethernet |
| **Packet Buffer** | 4 Mbits |
| **Jumbo Frame** | - |
| **MAC Table Size** | 8K |
| **VLAN Group** | 1 ~ 4094 |
| **IGMP Group** | Up to 256 Groups |

### Port Interface

| | |
|---|---|
| **Ethernet RJ45 Port** | 6*10/100BaseTx auto negotiation speed, Full/Half duplex mode, and auto MDI connection |
| **Fiber Ports** | 2*100Fx SC or ST in Single or Multi-Mode |
| **Wavelength** | Dependent on Fiber type and Distance |
| **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** | Present |
| **Power Reverse Polarity** | Present |
| **CPU Watchdog** | Present |
| **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)<br>1000BaseTX: UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m) |

### Mechanical Characteristics

| | |
|---|---|
| **LED Indicator** | Per Unit: Power 1 & 2 (Green), Fault (Green/Red) |
| **Housing** | Metal IP30 rated |
| **Dimension** | 54 x 142 x 99 mm |
| **Weight** | Unit: 2.4 lbs.; Shipping: 2.9 lbs. |
| **Mounting** | DIN-Rail; Wall-Mount (optional) |

### Power Requirement

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|---|---|
| **Input Voltage** | 12~48VDC Redundant Input |
| **Power Connection** | 1 removable 6-contact terminal block |
| **Power Consumption** | 15 Watts |

### Environmental Limits

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

### Regulatory Approvals

| | |
|---|---|
| **EMI** | FCC Class A |
| **EMS** | IEC61000-4-2,3,4,5,6,8<br>IEC61000-6-2,4 |
| **Free Fall** | IEC60068-2-32 |
| **Shock** | IEC60068-2-27 |
| **Vibration** | IEC60068-2-6 |
| **Green** | RoHS Compliant |
| **Certifications** | FCC, CE,<br>UL 61010-1, UL 61010-2-201 |
| **Warranty** | 5 Years |

# ORDERING INFO

| | |
|---|---|
| **LMX-0802-M** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx MM SC Fiber Ports |
| **LMX-0802-M-T** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx MM SC Fiber Ports ; EOT: -40˚ to 75˚C |
| **LMX-0802-ST-M** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx MM ST Fiber Ports |
| **LMX-0802-ST-M-T** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx MM ST Fiber Ports ; EOT: -40˚ to 75˚C |
| **LMX-0802-S3** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx SM SC Fiber Ports |
| **LMX-0802-S3-T** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx SM SC Fiber Ports ; EOT: -40˚ to 75˚C |
| **LMX-0802-ST-S3** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx SM ST Fiber Ports |
| **LMX-0802-ST-S3-T** | 8-Port Industrial PoE+ Managed Ethernet Switch with 6*10/100Tx + 2*100Fx SM ST Fiber Ports ; EOT: -40˚ to 75˚C |

### Optional Accessories

| | |
|---|---|
| **DR-75-48** | 75W Industrial Din Rail Power Supply (48VDC) |
| **DR-120-48** | 120W Industrial Din Rail Power Supply (48VDC) |
| **SDR-240-48** | 240W Industrial Din Rail Power Supply (48VDC) |
| **SFP-M-T** | 1 Gigabit Fiber SFP Transceiver, Multi-Mode 550M / LC / 850nm, -40°C~85°C |
| **SFP-S10-T** | 1 Gigabit Fiber SFP Transceiver, Single Mode 10KM / LC / 1310nm, -40°C~85°C |
| **DIN-RACK-2U** | Din-Rail to 19" Rack Mount Adapter for all Din-Rail Mountable Products, 2U Height |

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