LMP-1002C-SFP Series

Features

10-Port Industrial Gigabit PoE+ Managed Ethernet Switch, with 8*10/100Tx (30W/Port) and 2*Gigabit Combo (2*10/100/1000TX RJ45 and 2*100/1000 SFP Slots)
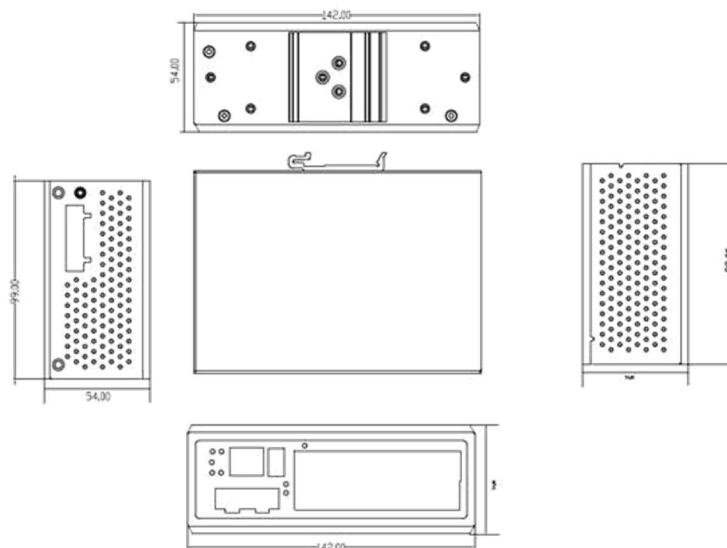
► Supports 8*10/100Tx IEEE 802.3at/af Compliant with 30W/Port, and 2*Gigabit Combo (2*10/100/1000Tx RJ45 & 2*100/1000 SFP Slots for Fiber Connections)
► Network Redundancy: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms)
► Supports IPv4/IPv6, and DHCP Option 66/67/82
► Supports Modbus/TCP Protocol for Device Management and Monitoring
► Configuration: Web Console, Telnet, CLI Command
► IGMP v1/v2 for Multicast Traffic Filtering
► 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
► Support RMON Function for Efficient Network Monitoring
► Support Port Mirroring for Online Diagnostic
► 5-Year Warranty

INTRODUCTION

Antaira's LMP-1002C-SFP series is a 10-port industrial Gigabit PoE+ managed Ethernet switch that is embedded with 8*10/100Tx Ethernet ports that support IEEE802.3at/af for a maximum of 30W/port, and 2*Gigabit combo ports with 2*10/100/1000Tx RJ45 or 2*100/1000 dual rate SFP slots for Gigabit fiber connections. The Gigabit combo ports provide flexibility to users for either a 10/100 or 1000Tx Fast Ethernet or a plug in SFP key module with a 100MB or Gigabit fiber connection. The combo ports help achieve bandwidth and/or distance concern applications. The LMP-1002C-SFP 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, RMON, ModbusTCP, and 802.1X/HTTPS/SSH/SSL increase determinism and improve network management for remote SCADA systems or control networks.

The LMP-1002C-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

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 802.3at/af PoE (Power-over-Ethernet) 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
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 Properties

Switch Architecture	Back-Plane (Switching Fabric): 5.6Gbps
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 148,800pps for 100Base-T Fast Ethernet 1,488,000pps for Gigabit 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	8*10/100BaseTx (PSE: 30W/Port) auto negotiation speed, Full/Half duplex mode, and auto MDI connection
Gigabit Combo Ports	2*RJ45 w/10/100/1000Tx Fast Ethernet and 2*100/1000 SFP Slot For Fiber
Wavelength	Refer to 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

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

Mechanical Characteristics

LED Indicator	Per Unit: Power 1 & 2 (Green), Fault (Red) PoE: Feeding Power (Green)
Housing	Metal IP30 rated
Dimension	54 x 142 x 99 mm
Weight	Unit: 2.4 lbs; Shipping: 3.2 lbs
Mounting	DIN-Rail; Wall-Mount (optional)

Power Requirement

Input Voltage	48~55VDC Redundant Input
Power Connection	1 removable 6-contact terminal block
PoE Power Output	25W/port @ 48VDC power input; 30W/port @ 51~55VDC power input
Power Consumption	15 Watts (no PD included); 255 Watts @48~55VDC

Environmental Limits

Operating Temperature	STD: -10 to 70°C 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 IEC61000-6-2,4
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
Certifications	FCC, CE, UL61010-1, 61010-2-201 NEMA TS2
Warranty	5 Years

LMP-1002C-SFP	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch with 8*10/100Tx (30W/Port) + 2*Gigabit Combo Ports (2*10/100/1000Tx RJ45, or 2*100/1000 SFP Slots)
LMP-1002C-SFP-T	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch with 8*10/100Tx (30W/Port) + 2*Gigabit Combo Ports (2*10/100/1000Tx RJ45, or 2*100/1000 SFP Slots); EOT: -40 to 75C
Optional Accessories	
MDR-60-48	60W Industrial Din Rail Power Supply (48VDC)
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, -40ºC~85ºC
SFP-S10-T	1 Gigabit Fiber SFP Transceiver, Single Mode 10KM / LC / 1310nm, -40ºC~85ºC
DIN-RACK-2U	Din-Rail to 19" Rack Mount Adapter for all Din-Rail Mountable Products, 2U Height