



MLB-E4205-12-P-F

MLB-E4206-12-G-P-F

12-Port PoE

Managed (Gigabit) Switch

➔ DATASHEET





MLB-E4205-12-P-F

MLB-E4206-12-G-P-F

12-Port PoE Managed (Gigabit) Switch



MLB-E4205-12-P-F & MLB-E4206-12-G-P-F switch is a Managed 10/100M Gigabit Ethernet switch, providing 4/8 10/100/1000BaseT PoE PSE ports and 100/1000BaseSFP ports. It complies to IEEE 802.3at standard and able to deliver up to 30 watts power per port along with data on standard Ethernet cabling. The switch can be used to power any IEEE 802.3af /at compliant PoE PD devices with PoE power management feature, which eases the deployment effort of planning PoE power budget and eliminates the need for additional wiring to reach power source.

IEEE
802.3at
PoE+

Managed

VLAN
Mirroring

-40~+75°C

Industrial
Design

Features

- Provides 4 or 8 10/100/1000Base TX PoE ports plus 2 or 4 100FX/1000BaseF SFP slots
- IEEE 802.3af 15.4W/IEEE 802.3at 30W high power PoE
- Total 120W PoE power budget
- 9K jumbo frames
- L2 wire-speed switching engine
- 8K MAC forwarding addresses
- Network redundant LACP, spanning tree STP, RSTP & MSTP, Flash Ring and Scale Chain (< 20 ms)
- Port-based/tag-based VLAN, IEEE 802.1ad/QinQ VLAN, add/remove VLAN tags
- Multicasting supports IGMP v1/v2, proxy & snooping
- Multicast/Broadcast/Flooding Storm Control
- IEEE802.1x access control
- Per VLAN mirroring
- CLI/Web/SNMP management interfaces
- PoE PSE power management & PD power consumption
- Dual power input & reverse power protection
- DIN-rail and wall mounting option
- Only MLB-E4206-12-G-P-F model supports Gigabit

Ethernet

Operating Mode	Store and forward, L2 wire-speed/non-blocking switching engine
MAC Addresses	8K
Jumbo Frames	9K Bytes

Copper RJ45 Ports

Speed	10/100/1000 Mbps (MLB-E4206-12-G-P-F supports 1000 Mbps)
MDI/MDIX Auto-crossover	Supports straight or cross wired cables
Auto-negotiating	10/100/1000 Mbps speed auto-negotiation; full and half duplex
Ethernet Isolation	1500 VRMS 1 minute

SFP (Pluggable) Ports

Port Types Supported	SFP (pluggable) Ports 100/1000BaseSFP slot Supports 100FX; supports 100/1000BaseT SFP transceiver (MLB-E4206-12-G-P-F supports 1000 Mbps)
Fiber Port Connector	LC typically for fiber (depends on module)
Optimal Fiber Cable	Typical 50 or 62.5/125 μ m for multimode (mm); Typical 8 or 9/125 μ m for single mode (sm)

Network Redundancy

Flash Ring	Link loss recovery < 20ms. Single & multiple rings supported
Scale Chain	Link loss recovery < 20ms.
Spanning Tree Protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port Trunk with LACP	Static trunk or dynamic via LACP (Link Aggregation Control Protocol)

Bridge, VLANs & Protocols

Flow Control	IEEE 802.3x (full duplex) and back-pressure (half duplex)
Max. VLANs	256
VLAN Types	Port-based VLANs IEEE 802.1Q tag-based VLANs IEEE 802.1ad double tagging (Q in Q)
Multicast Protocols	IGMP v1, v2 with up to 255 multicast groups IGMP snooping and querying Immediate leave and leave proxy Throttling and filtering
LLDP	IEEE 802.1ab Link Layer Discovery Protocol (LLDP)

Traffic Management & QoS

Priority	IEEE 802.1p QoS
Number of Queues Per Port	8
Scheduling Schemes	SPQ, WRR
Traffic Shaper	Port-based shaping

Security

Port Security	IP and MAC-based access control IEEE 802.1X authentication network access control
Storm Control	Multicast/Broadcast/Flooding Storm Control

Management

User Management Interfaces	Cisco-like CLI (Command Line Interface) WEB-based management SNMP v1, v2c, v3; Telnet (5 sessions)
Management Security	HTTPS, SSH Radius Client for management
Upgrade & Restore	TFTP/FTP for configuration import/export, TFTP/FTP for firmware upgrade
Diagnostic	Syslog; Per VLAN mirroring Ethernet copper connection diagnostic tool; SFP with DDM (Digital Diagnostic Monitoring)
MIBs	RFC 1757 RMON 1, 2, 3, 9; RFC 2674 Q-Bridge MIB; RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Client, Server, Relay, Snooping, Option 82
NTP/SNTP	Yes
System Status	Device info/status; Ethernet port status; PoE status
PoE Management	Scheduling; power control; PoE PD power consumption

Power

Power Input	Redundant input terminals
Input Voltage Range	46~57VDC
Total PoE Output Budget	120W
PoE PSE Port Output Power Management	Scheduling; power control; PoE PD power consumption
Reverse Power Protection	Yes
Transient Protection	> 15,000 watts peak
Power Consumption	15W without PD loading

Indicators

Power Status Indication	Indication of power input status
Ethernet Port Indication	Link & Speed
PoE Status	Indication of PoE power applying

Environmental & Compliances

Operating Temperature Range	-40~+75°C (cold startup at -40°C)
Storage Temperature Range	-40~+85 °C
Humidity	5~95% (non-condensing)
Vibration, Shock & Freefall	Vibration: EC60068-2-6 Shock: IEC60068-2-27 Freefall: IEC60068-2-32
Certification Compliance	CE/FCC/UL-508; EN-50121-4
Electrical Safety	UL508/CSA C22, EN61010-1, CE
EMC	FCC Part 15, CISPR 22 (EN55022) class A IEC61000-4-2, -3, -4, -5, -6
RoHS and WEEE	RoHS (Pb free) and WEEE compliant
MTBF	> 25 years

Mechanical

Ingress Protection	IP30
Installation Option	DIN-rail mounting, wall mounting
Dimension (L)x(W)x(H)	77x154x128mm
Weight	1410g

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