LMSW-42
Ruggedized Unmanaged PoE
Gigabit Ethernet Switch

Description:

The LMSW-42 is a low cost ruggedized field switch with 2 fiber optic ports and 4 RJ-45 ports. High Power PoE ruggedized switch is specifically designed to meet IEEE 802.3af/at standards for powering network devices with up to 30 W output per PoE port. With PoE function, it becomes simplified to install network devices such as IP phones, IP surveillance cameras, wireless access points, and other PoE enabled devices in outdoor or remote areas where are hard-to-reach power source.

The LMSW-42 switch supports 4-port Power-over-Ethernet on ports 1 to 4 and 2-port 100/1000Base-X optical fiber. The switch is classified as power source equipment (PSE) can be used to power IEEE 802.3af/at standard devices (PD), eliminating the need of additional power cable wiring. This PoE switch supports IEEE 802.3/802.3u/802.3x/802.3ab with 10/100/1000M, full/half-duplex, MDI/MDI-X auto-sensing to provide an economical high-bandwidth solution for your ruggedized Ethernet network.

Features:

- Robust compact design
- Resistant to harsh environmental conditions and rough handling
- 2x 100/1000Base-X fiber FO, HMA-J connector
- 4x RJ-45 10/100/1000Base-T(X)
    - full/half-duplex,
    - MDI/MDI-X auto-sensing
    - IEEE802.3at/af PoE Output (30 W/Per Port)
- Maximum PoE Output power budget 120 W
- LED signalization Per unit:
- Input Power: DC 50 V

Specifications:

Standard data PoE	10/100/1000Base-T(X): IEEE 802.3/802.3u/802.3ab/802.3z/802.3x/802.3at
	IEEE802.3at/af PoE Output (30 W/per port)
Interface	Metallic: mechanical resistant, watertight connectors
	Optical: HMA-J 50/125 µm or 62.5/125 µm MM optical cable, 9/125 µm SM optical cable
Wavelength	MM: 1300 nm, SM: 1310 nm, 1550 nm
Distance	UTP cable 10/100/1000Base-TX: 100 m
	MM optical cable, full duplex: 2 km,
	SM optical cable, full duplex: 10, 30 km
Power supply:	50 V DC
	Power consumption: 130 W max
Electromagnetic compatibility tests:	
EMC – Electromagnetic compatibility: MIL-STD 461F methods RE102, CE102, CS114, RS103	
Environmental Temperature Humidity	Fulfils MIL-STD 810E
	Operating: -40 to +75°C, Storage: -40 to +85°C
	10% to 95%
Mechanical	Fulfils MIL-STD 810E, IP 65 protection
Dimensions	215 x 215 x 65 mm (W x D x H)
MTBF	700 000 hrs

Functionality:

Switch Architecture	Back-plane (Switching Fabric): 12 Gbps
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Jumbo Frame	10K Bytes
MAC address Table Size	4K
Packet Buffer Size	1.75 Mbits
PoE Standard	IEEE 802.3at/af
PoE RJ-45 pin	RJ-45 port # 1to # 4 support IEEE 802.3at/af
PoE RJ-45 pin assignment	End-Span, Alternative A mode
	Positive (V+): RJ-45 pin 1, 2.
	Negative (V-): RJ-45 pin 3, 6.
	Data (1, 2, 3, 6, 4, 5, 7, 8)
Network Connector	4x RJ-45, RJF type
	10/100/1000BaseT(X) auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP above Cat. 5e cable
	EIA/TIA-568 100-Ohm (100 m)
Fiber Cable	Multimode: 50/125 µm, 62.5/125 µm
	Single mode: 9/125 µm
Protocol	CSMA/CD
Reserve polarity protection	
Overload current protection	

Ordering code:

LMSW-42	-	XX	-	XX	-	DC50

		Fiber optic		Distance (FO)		Power supply
		M5 MM 50/125 µm		**XX**[1]: 2 km (MM)		DC: 50 V DC
		M6 MM 62.5/125 µm		**10**: 10 km		
		S3 SM 1310 nm		**30**: 30 km		

Note: 1) MM fiber – the distance depends on fiber type, up to 2 km.
SM fiber – longer distance on request

Standard accessories:
- Power cable
  LMCAB-PSC-03-P2S
  - 1 side: 2-pins plug connector
  - 2 side: free wires
- Manual

Options:
- Military-Grade UTP cables (IP67)   xx – length m
  LMCAB-LAN-xx-RJF6MG-RJ45
  LMCAB-LAN-xx-RJ45-RJ45
- Tactical fiber optic cable with HMA-J connectors