

Onboard Managed Ethernet Switch with 10 Ports

FLOWNEX - MSW10

Flownex-MSW10 is a managed POE Ethernet switch ideal for onboard railway applications. They are optimized with high quality M12 connectors.

Flownex-MSW10 are designed in a metal housing to reach the protection class of IP54 with wall mounting feature. It offers management functionality to realize network segmentation and redundant ring topology networks.

The Flownex-MSW10 ethernet switches provide 10 ethernet M12 ports; 8 ports support IEEE 802.3at/af compliant PoE functionality. The switch PSE system enables 30W high power function. The switch comes with ignition sense to reduce the power consumption of vehicle battery.

They are designed to be compliant with the essential sections of the EN50155, ITxPT.



Highlights

- Multilayer Switch
- Number of Ports: 10 Ports, 8 x 10/100Mbps + 2 x 10/100/1000Mbps
- POE: Ports : 8, PoE classes 0,1,2,3,4, 802.3at compliant, PoE management
- Power Supply: 24V nominal supply
- Operating Temperature: -40°C~85°C
- Linux based (OpenWRT)

Ethernet communication	
Standard	<ul style="list-style-type: none"> • IEEE 802.3u 10Base-T Ethernet • IEEE 802.3u 100Base-TX Ethernet • IEEE 802.3ab 1000Base-TX Gigabit Ethernet • IEEE 802.3af Power over Ethernet • IEEE 802.3at High Power over Ethernet • IEEE802.3x Flow Control and Back Pressure • IEEE802.3ad Port trunk with LACP • IEEE802.1d Spanning Tree • IEEE802.1s Multiple Spanning Tree • IEEE802.3ad Link Aggregation Control Protocol (LACP) • IEEE802.1AB Link Layer Discovery Protocol (LLDP) • IEEE802.1X User Authentication (Radius) • IEEE802.1p Class of Service • IEEE802.1Q VLAN Tag
Switch Architecture	Non-blocking eight traffic class QoS switch fabric
Mac Address	16K
Jumbo frame	10K Bytes
Interface	
Ethernet Ports	2 x 1000 Base-T/ Gigabit Ethernet port for uplink and downlink with bypass enable: M12-X code 8-pin female connectors 8 x 100 Base-T/ Fast Ethernet ports : M12-D code 4-pin female connectors
LED Indicators	Ethernet port: Link/Activity (Green), Speed (Green) PoE: Link/Act (Green, PoE model) Per unit: Power 1 (Green), MOD (Green) ERR (Red)
USB Port	OS update
Power Over Ethernet	
Power over Ethernet	IEEE 802.3af/at,End-span wiring architecture
PoE operating mode	Auto PoE: IEEE 802.3af/at with 2-event detection for PD
Powering capability	IEEE 802.3af : 15.4 W, IEEE802.3at : 30W
PoE system power budget	80 Watt
Power Supply	24V nominal(16.8V-33.6V)
Enclosure	Aluminium
IP Rating	IP54
Enclosure Dimensions	232.08 x 157 x 85.5 mm including wall mount
Operating Temperature	-40°C~85°C


Mechanical
IP54


Compliance
CE, ROHS, EN50155, EN45545, ITxPT