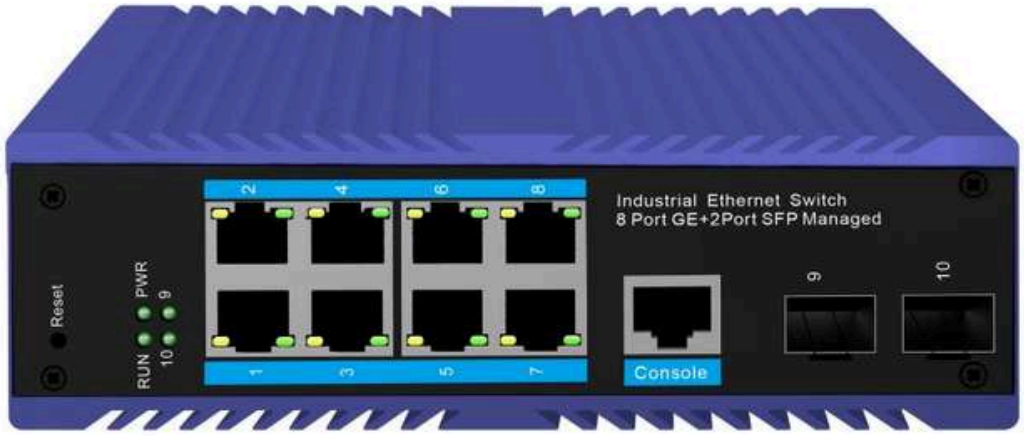
mootek®
TECHNOLOGIES PVT. LTD.

10-port 10/100M/1000M L2+ Managed Industrial Ethernet Switch

Model : MT-IEMS-10P-8L-2SFP



Features

Gigabit access, SFP fiber port uplink, Integrated Bypass function

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support physical single-mode single fiber optical path(Bypass) function, pure hardware switching, short switching time, does not affect the data transmission rate and improves the stability of the network system.

Network management and fast ring function

- STP/RSTP/MSTP/ERPS.
- Static and dynamic aggregation.
- IEEE802. 1Q VLAN, flexible VLAN division, Access,Trunk and Hybrid.
- QoS, Priority mode based on 802. 1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- IGMP Snooping V1/V2/V3 meets multi-terminal high-definition video surveillance and video conference access requirements.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, andprovide flexible and safe access control.

Security

- 802.1X authentication.
- Port isolation, storm control.
- IP-MAC-VLAN-Port binding.

Stable and reliable

- CCC, CE, FCC, RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

One-stop remote control and management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
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Technical Specifications

Model No.	MT-IEMS-10P-8L-2SFP
Interface Characteristics	
Fixed Port	8*10/100/1000Base-T RJ45 ports 2*100/ 1000Base-X uplink SFP slot ports 1*RS232 console port
Ethernet Port	Port 1-8 support 10/ 100/ 1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)

SFP Slot Port	Gigabit SFP optical fiber interface, default no include optical modules (Only supports single-mode single fiber optical module. LC)
Wavelength/Distance	multimode: 850nm 0~550M,1310nm 0~2KM single mode: 1310nm 0~40KM，1550nm 0~120KM
Chip Parameter	
Network Management Type	L2+
Ring network	Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of<20ms
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	20Gbps
Buffer Memory	14.88Mpps
MAC	8K
Reset Switch	Yes, Press and hold the reset switch for 10s and release it to restore the factory settings

LED Indicator	Power Indicator Light	P：1 Green
	Fiber Indicator Light	F：1 Green (Link,SDFED)
	On the RJ45 seat	Yellow: Indicate PoE
		Green: Indicates network working status
Reset Switch	Yes, Press and hold the reset switch for 10s and release it to restore the factory settings	
Power		
Working Voltage	DC12-57V, 4 Pin industrial phoenix terminal, support anti-reverse protection	
Power Consumption	Standby<6W, Full load<8W	
Power Supply	DC12-57V industrial power supply	
Certification	CCC, CE mark, commercial, CE/LVD EN62368- 1, FCC Part 15 Class B, RoHS	
Mechanical Properties	IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)	

Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~ 1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m , 1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4- 10(damped oscillation):30A/m 1MHz IEC61000-4- 12/ 18(shockwave):CM 2.5kV,DM 1kV IEC61000-4- 16(common-mode transmission):30V; 300V, 1s FCC Part 15/CISPR22(EN55022):Class B IEC61000-6-2(Common Industrial Standard)
Operation TEMP /Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP /Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	172mm*145mm*55mm
Installation	Desktop, DIN rail
ACL	256ACLs L2, L3 e L4 Time-based ACL

Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Storage TEMP /Humidity	-40~+85°C;5%~95% RH Non condensing
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QOS	port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port