

ET8122MH Series

Managed Hardened 8-port 10/100BASE-TX + 2-port 1G SFP Ethernet Switch



OT Systems' fast Ethernet ET8122MH, an 8-port 10/100Base-TX + 2-port 1G SFP Ethernet switch, provides reliable and flexible transmission connectivity for complex networks. Two 1G SFP ports offer integrators hot-swappable input/output slots that can be used and interchanged with a wide variety of SFP modules. The ET8122MH features redundant ring topology for maximum network availability and design efficiency. In addition to design flexibility, the ET8122MH offers system management alternatives including Telnet, SSL/SSH, SNMP V1, V2c, V3, RMON, web browser, console or TFTP. Designed and tested to function at extreme temperatures ranging from -40°C to 75°C (-40°F to 167°F), the ET8122MH switch provides worry-free operation where outdoor elements are a factor.

Features

- Complies with EN50121-4 Environmental requirement for Railway application
- Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- Proprietary "Ring" support for network redundancy; recovery time <15ms
- IEEE802.1w RSTP, IEEE802.15 MSTP and IEEE802.1D STP compatible
- IP Multicast Filtering through IGMP Snooping V1, V2 & V3
- Supports port-based VLAN and IEEE802.1Q VLAN Tagging and GVRP
- IEEE802.1p QoS with four priority queues
- MAC-based trunking with automatic link fail-over
- RS-232 console, Telnet, SSL/SSH, SNMP V1, V2c & V3, RMON, Web Browser, and TFTP Management
- Supports NTP
- Supports Command Line Interface in RS-232 Console
- Support IEEE802.1x Security
- Bandwidth Rate Control
- Per-port programmable MAC address locking
- Up to 24 Static Secure MAC address per port
- Port mirroring
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Redundant power input with Terminal Block and DC Jack
- 40°C to 75°C (-40°F to 167°F) operating temperature range
- Hardened Aluminum case

Ordering Information

Model	Description			
ET8122MH-SS-YY	8-port 10/100Base-TX + 2-port 1G SFP Ethernet Switch			
(YY) =	Installation	Power Adapter (Purchase Separately)		
SA	Standalone Wall-mount	41-136041. 36W/3A 12VDC Hardened Power Adapter. DC Jack with latch. (US, European, UK or Australian power plug available) 41-136042. 36W/3A 12VDC Hardened Power Adapter. Open wire for Terminal Block. (US, European, UK or Australian power plug available)		
DR	DinRail	DR-30-24. 30W/1.5A 24VDC Din-rail Power supply. Open wire for Terminal Block.		
SFP Modules (Purchase Separately)	Fiber Options	Wavelengths	Link Budget	Max. Distance
CT-1250TSP-MB2L-A	Multimode/2-fiber/LC	1310nm	13.5dB	2 km
CT-1250TSP-MB5L-A	Singlemode/2-fiber/LC	1310nm	15dB	20 km
CT-1250TBP-MB1L-A	Multimode/WDM 1-fiber/LC	TX:1310nm/RX:1550nm	7dB	550 m
CT-1250TBP-LB1L-A	Multimode/WDM 1-fiber/LC	TX:1550nm/RX:1310nm	7dB	550 m
CT-1250TBP-MB5L-A	Singlemode/WDM 1-fiber/LC	TX:1310nm/RX:1550nm	15dB	20 km
CT-1250TBP-KB5L-A	Singlemode/WDM 1-fiber/LC	TX:1550nm/RX:1310nm	15dB	20 km

NOTES: (1) Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.

(2) Operating distance of multimode is limited by the characteristics of the fiber bandwidth .

(3) Please feel free to consult factory for any special requirement and customization

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Specifications

Ethernet		Environmental	
Standards:	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX/FX IEEE802.3ab 1000BASE-T IEEE802.3z 1000BASE-SX/LX IEEE802.3x, IEEE802.1p IEEE802.1Q, IEEE802.1w IEEE802.1x	Operating Temperature:	-40°C to 75°C (-40°F to 167°F) Tested -40°C to 85°C (-40°F to 185°F)
Packet Buffer Memory:	2M bits	Storage Temperature:	-40°C to 85°C (-40°F to 185°F)
Processing Type:	Store and forward Half-duplex back-pressure and IEEE802.3x Full-duplex flow control	Relative Humidity:	5% to 95% non-condensing
Forward and Filter Rate:	14,880pps (10Mbps) 148,810pps (100Mbps) 1,488,100pps (1000Mbps)	Regulatory Approvals	
Cabling:	10Base-T: Cat5 or above 100Base-TX: Cat5 or above	ISO9001	
Maximum Distance:	Cat5 UTP up to 100m	FCC Part 15, Class A	
Connector:	8 x RJ45	EN61000-6-4:	
Address table size:	8192MAC addresses	-EN55022	
Electrical and Mechanical		-EN61000-3-2	
Input Power:	12 to 48VDC (Terminal Block); 12V (DC Jack)	-EN61000-3-3	
Power Consumption:	11W Max. 0.92A@12VDC, 0.46A@24VDC	EN61000-6-2:	
Protection:		-EN61000-4-2 (ESD Standards)	
Overload Current:	Present	Contact: +/- 6KV; Criteria B	
Reverse Polarity:	Present	Air: +/- 8KV; Criteria B	
LED Indicators:		-EN61000-4-3 (Radiated RFI Standards)	
Power:	Power Status (Power1, 2, 3 and Fault)	10V/m, 80 to 1000MHz; 80% AM Criteria A	
10/100TX(Per Port):	Link/Activity, Speed	-EN61000-4-4 (Burst Standards)	
1000 SFP(Per Port):	Link/Activity	Signal Ports: +/- 4KV; Criteria B	
Alarm Contact:	One relay output (with current 1A@24VDC)	D.C. Power Ports: +/-4KV; Criteria B	
Dimensions (WxDxH):	60 X 125 X 145 mm	-EN61000-4-5 (Surge Standards)	
Weight:	1.1Kg	Signal Ports: +/-1KV; Line-to-Line; Criteria B	
Casing:	IP30 Aluminum case	D.C. Power Ports: +/-0.5KV; Line-to-earth; Criteria B	
Mounting Options:	Wall-mount DIN-rail (Top hat type 35mm)	-EN61000-4-6 (Induced RFI Standards)	
		Signals Ports: 10V _{rm} @0.15~80MHz; 80% AM Criteria A	
		D.C. Power Ports: 10V _{rm} @0.15~80MHz; 80% AM Criteria A	
		-EN61000-4-8 (Magnetic Field Standards)	
		30A/m@50, 60Hz; Criteria A	
		IEC60068-2-6 Fc (Vibration Resistance):	
		5g@10~150Hz, Amplitude 0.35mm (Operation/Storage/ Transport)	
		IEC60068-2-27 Ea (Shock):	
		25g@11ms (Half-Sine Shock Pulse; Operation)	
		50g@11ms (Half-Sine Shock Pulse; Storage/Transport)	
		IEC60068-2-32 Ed (Free Fall):	
		1m	