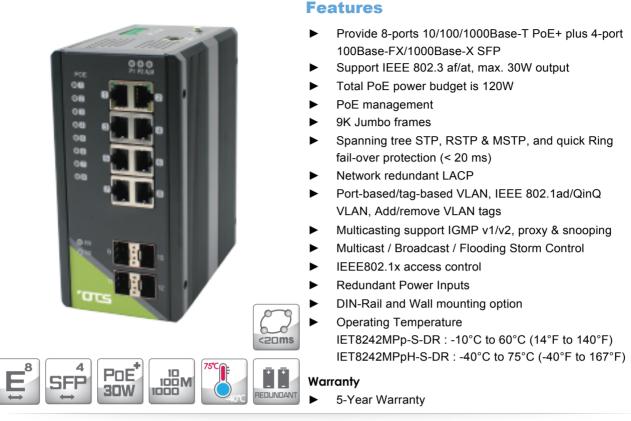# IET8242MPp Series

Hardened / Industrial Managed 8-port 10/100/1000Base-TX (PoE+) + 4-port 100/1000Base-FX SFP Ethernet Switch

Features

- ► Provide 8-ports 10/100/1000Base-T PoE+ plus 4-port 100Base-FX/1000Base-X SFP
- ► Support IEEE 802.3 af/at, max. 30W output
- ► Total PoE power budget is 120W
- ► PoE management
- ► 9K Jumbo frames
- ► Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- ► Network redundant LACP
- ► Port-based/tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags
- ► Multicasting support IGMP v1/v2, proxy & snooping
- ► Multicast / Broadcast / Flooding Storm Control
- ► IEEE802.1x access control
- ► Redundant Power Inputs
- ► DIN-Rail and Wall mounting option
- ► Operating Temperature
  IET8242MPp-S-DR : -10°C to 60°C (14°F to 140°F)
  IET8242MPpH-S-DR : -40°C to 75°C (-40°F to 167°F)

Warranty
- ► 5-Year Warranty

Overview

The IET8242MPp Series are designed for high speed data communication of PoE devices for local and remote far end connections. The IET8242MPp seriesfully managed switches offer eight 10/100/1000Mbps copper twisted-pair ports with high power PoE (PoE+) plus four 100/1000Mbps SFP ports. Each Ethernet ports comply with IEEE 802.3af/at provides maximum of 30W output power capable to supply power to power hungry PoE devices such as PTZ IP cameras and access control devices. IET8242MPp Series support single/multi-mode, 1/2 fiber connections to extend distance up to 20Km for long-distance connections. They support dual DC power inputs (46– 57VDC). In case of a power supply failure, there is no service interruption. With OTS SuperXtra ring, the network recovery time can be reduced to less than 20ms (in 250 nodes). In addition, the products support different ring topology including single/dual ring to ensure excellent reliability and availability of the non-stopped systems. Rich of management interfaces (web, CLI, telnet and SNMP) allow for easy system configuration and monitoring. L2 features include Port/Tag-based VLAN, IGMP snooping, link aggregation, Port-based security and QoS. Housed in an IP30 rugged DIN-rail fan-less case enables the switches to be placed in any locations and well-suited in the harsh and industrial environments.

IET8242MPpH switches operate from -40°C to +75°C allow them to work in extreme weather conditions. They are ideal products for reliable, secure and affordable transmission network working in severe and mission-critical environments for industrial applications including surveillance systems, factory automation, intelligent transportation and railway systems, energy and power systems.

Typical Application

Wind Power Plant

Specifications

Ethernet

Standards	IEEE802.3 10Base-T
	IEEE802.3ab 1000Base-T
	IEEE802.3u 100Base-TX
	IEEE802.3z 1000Base-X
	IEEE802.3at
Processing Type	Store-and-Forward
Switch Fabric	IET8242MPp Series: 24 Gbps
MAC addresses	8K
Jumbo frames	9K Bytes

Interface

RJ45 Ports	8 x 10/100/1000Mbps, Auto-MDI/MDI-X, Auto-negotiation, Full/Half-Duplex
SFP	4 x 100Base-FX or 1000Base-X SFP slot, LC

Electrical and Mechanical

Input Power	Redundant Input Terminals
Input voltage range	46-57 VDC
Power Consumption	15W without PD loading
Reverse power protection	Yes
PoE	
Standard	IEEE802.3at, IEEE802.3af
Port	RJ45 Port 1 ~ Port 8
Per Port Power	30W (Alternative A Mode)
Total PoE output power budget	120W
LED Indicators	
Power	Power Status
Ethernet (Per Port)	Link/Activity, Speed
PoE status	PoE Power in use
Dimensions (W x D x H)	77 x 154 x 128 mm
Net weight	1.5 Kg
Unit with packing	2 Kg (include accessories)
Casing	Aluminum Case
Ingress protection	IP30
Mounting Options	DIN-Rail / Wall Mount

Software Features

Network Redundancy

Fast failover protection rings	Link loss recovery <20ms
	Single & Multiple rings supported
Spanning Tree Protocol	IEEE802.1D STP, IEEE802.1w RSTP, IEEE802.1s MSTP
Port Trunk with LACP	Static trunk or Dynamic via LACP

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	IEEE8021p 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

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Specifications

Management

User Management interfaces	CLI, WEB, SNMP v1, v2c
	Telnet
PoE management	Scheduling; power control; PoE PD power consumption
PoE PSE port output power management	Scheduling; power control; PoE PD power consumption
Upgrade & Restore	FTP for Configuration Import/Export,
	FTP for Firmware Upgrade
Management Security	HTTPs, SSH
	Radius Client for Management
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

Environmental

Operating Temperature	
Hardened	-40°C to 75°C (-40°F to 167°F)
Industrial	-10°C to 60°C (14°F to 140°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95% non-condensing
MTBF	> 200,000 hrs

Compliance and Regulatory Approvals

ISO9001	Yes
Certification Compliance	CE/FCC
EMC	FCC Part 15, CISPR 22 (EN55022) Class A, IEC61000-4-2, -3, -4, -5, -6
Vibration, Shock & Freefall	IEC60068-2-6, -27, -32 (pending)
Electrical Safety	CSA C22, EN61010-1, CE (pending)
RoHS and WEEE	RoHS (Pb free) and WEEE compliant

Ordering Information

Available Model	Description
IET8242MPp-S-DR	Industrial Managed 8-port 10/100/1000Base-TX (PoE+) + 4-port 100/1000Base-FX SFP Ethernet Switch
IET8242MPpH-S-DR	Hardened Managed 8-port 10/100/1000Base-TX (PoE+) + 4-port 100/1000Base-FX SFP Ethernet Switch

Optional Accessories (to be purchased separately)

SFP	(S) = SFP Option. Please select your SFP on our SFP Modules page at the back of the catalogue or our website www.ot-systems.com for details.
Power Supply	Please refer to the power supply information at the back of the catalogue,our website www.ot-systems.com, or consult OTS sales at sales@ot-systems.com for your power system design properly.

Package Checklist

■ Managed PoE Ethernet Switch	x 1
■ Wall Mount Plates	x 2
■ DIN-Rail Clip	x 1
■ M3 Screws (for the Wall Mount Plates & DIN Clip)	x 4
■ DC Power Terminal Block	x 1
■ SFP Port Dust Covers	x 4
■ Quick Installation Guide	x 1

OT Systems Ltd., Sep 2015

Due to continuous improvement, all product specifications are subject to change without further notice.