

Industrial PoE Managed Switches

EH7506/EH7508/EH7512 Series



Feature Highlights

- Up to 8 10/100 BASE-T(X) ports and 4 10/100/1000 BASE-T(X) Combo ports
- Up to 8 802.3af or 802.3at compliant PoE ports
- ERPS Ring (recovery time < 20ms @ 40 switches), STP/RSTP for network redundancy
- Remote management over Web browser, Telnet console, serial console, and Windows Utility

Product Description

The EH7512 Series is a highly reliable and fault-tolerant Industrial Managed PoE Ethernet Switch. It equips up to eight 10/100BASE-T(X) RJ-45 ports and up to four 10/100/1000BASE-T(X)/FX RJ-45 and SFP ports. With its high performance switching capacity, EH7512 Series provides network redundant self-recovery mechanism is less than 20ms on full load which allows you to scheme a reliable Ethernet network by building a redundant ring topology as your back-up solution. With a Multifunctional web dashboard, EH7512 Series offers intelligent features such as Quality of service (QoS), Virtual LAN (VLAN), IGMP, Port mirroring and security.

The EH7512 Series is designed for Industrial rugged applications. It equips a 5-pins terminal block to provide dual redundant power inputs with Reverse Polarity Protection and two sets of relay which allows field engineers to build up a stand-alone fault alarm system. Its IP30 housing protection, wide operating temperature of -20 to 70°C and DIN-Rail mounting capacities are liable to do most industrial filed applications.

General Specifications

Technology

| | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards | IEEE802.3af / 802.3at for Power-over-Ethernet IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-T(X) and 100BASE-FX IEEE802.3ab for 1000BASE-T(X) IEEE802.3z for 1000BASE-X IEEE802.3x for Flow Control IEEE802.1D-2004 for Spanning Tree Protocol IEEE802.1w for Rapid STP IEEE802.1Q for VLAN Tagging IEEE802.1p for Class of Service IEEE8021X for Authentication IEEE802.3ad for Port Trunk with LACP |
| Protocols | IGMPv1/v2, GVRP, SNMPv1/v2c/v3, ICMP, ARP, Telnet, DHCP Client, TFTP, SNMP, SMTP, RMON, HTTP, Syslog, PROFINET, Modbus/TCP/Ethernet/IP, LLDP, IEEE 1588 PTP V2, IPv4, NTP Client, EAP, RADIUS, 802.1x MIB II, IF-MIB, SNMPv2 MIB, BRIDGE-MIB, RMON MIB Group 1,2,3,9 |
| MIB | |
| Flow Control | IEEE802.3x for Flow Control, back pressure flow control |

Switch Properties

| | |
|--------------------------------|---------------|
| Priority Queues | 8 |
| Max. Number of Available VLANs | 256 |
| VLAN ID Range | VID 1 to 4094 |
| Static IGMP Groups | 256 |
| Dynamic IGMP Groups | 256 |
| MAC Table Size | 16K |
| Packet Buffer Size | 12 Mbit |

Interface

| | |
|----------------|----------------------------------------------------------------------------|
| RJ45 Ports | 10/100/1000BASE-T(X) or 10/100 BASE-T(X) auto negotiation speed |
| Fiber Ports | 100BASE-FX / 1000BASE-X SFP slot |
| LED Indicators | PWR1, PWR2, Alarm, Run, Ring, Ring Master, RJ-45 Link/Speed, SFP Link, PoE |
| Console | RS232 (RJ45 connector) |
| Relay Output | 2 relay outputs with current carrying capacity of 2A @30VDC |
| DIP Switches | Ring Control |
| Button | Reset Button |

Power Management

| | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Voltage | 9-48 VDC or 18~30VAC for Non-PoE models 45-57 VDC for 802.3af mode 51-57 VDC for 802.3at mode |
| Input Current | Max. 1.5A @ 18VAC Max. 2.0A @ 9VDC (without PD) Max. 3.2A @ 45VDC (Support up to 8 ports at 15.4W per PoE port) Max. 5.5A @ 51VDC (Support up to 8 ports at 30W per PoE port) |
| Connector | Removable 5-pin Terminal Block for power input |
| Reverse Polarity Protection | Present (DC only) |

Physical Characteristics

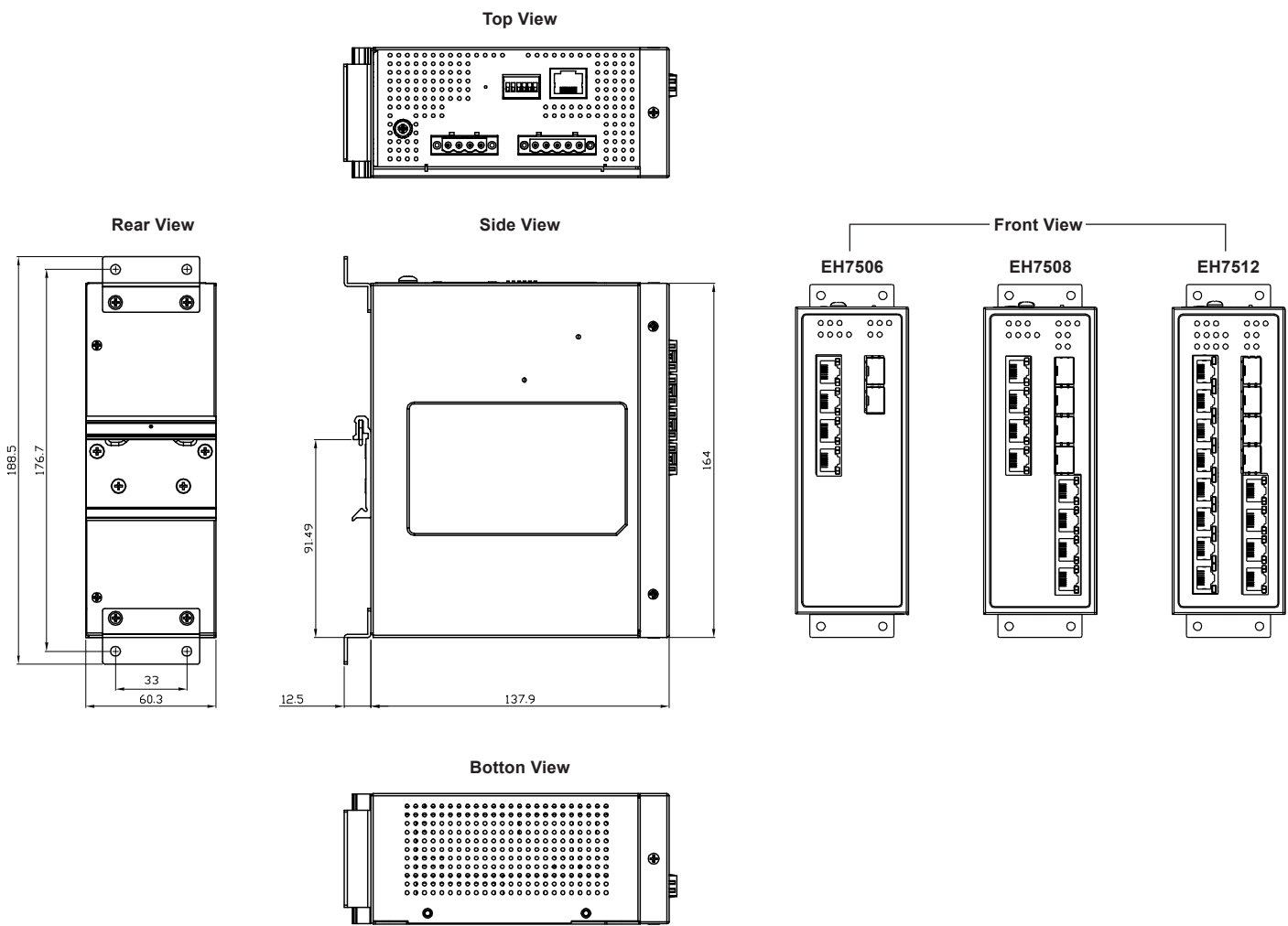
| | |
|--------------|--------------------------------------|
| Housing | IP30 protection, metal housing |
| Dimension | 60.3mm x 137.9mm x 164mm (W x D x H) |
| Weight | approx 1.2 kg (Max.) |
| Installation | DIN-Rail, Wall Mount (Optional Kit) |

Environmental Limits

| | |
|---------------------------|--------------------------|
| Operating Temperature | -20°C~70°C (-4°F~158°F) |
| Storage Temperature | -40°C~85°C (-40°F~185°F) |
| Ambient Relative Humidity | 5%~95% non-condensing |

| Regulatory Approvals | | | | |
|----------------------|---------------------------------------------------------------------------------|----------------------|----------------------|---|
| Safety | UL60950-1 2nd Ed. /CSA C22.2 No.60950-1-07 2nd Ed. / EN60950-1 / CB | | | |
| EMC | FCC Part 15, Subpart B, Class A / EN 61000-6-4:2007+A1:2011 / EN 61000-6-2:2005 | | | |
| Test | Item | Value | Level | |
| IEC 61000-4-2 | ESD | Contact Discharge | ±6KV | 3 |
| | | Air Discharge | ±8KV | 3 |
| IEC 61000-4-3 | RS | Radiated(Enclosure) | 10 (V/m) | 3 |
| IEC 61000-4-4 | EFT | AC Power Port | ±2.0 KV | 3 |
| | | DC Power Port | ±2.0 KV | 3 |
| | | Signal Port | ±1.0 KV | 3 |
| IEC 61000-4-5 | Surge | AC Power Port | Line-to-Line ±1.0KV | 3 |
| | | AC Power Port | Line-to-Earth ±2.0KV | 3 |
| | | DC Power Port | Line-to-Line ±1.0KV | 3 |
| | | DC Power Port | Line-to-Earth ±2.0KV | 3 |
| | | Signal Port | Line-to-Earth ±1.0KV | 3 |
| IEC 61000-4-6 | CS | Conducted(Enclosure) | 10 Vrms | 3 |
| IEC 61000-4-8 | PFMF | (Enclosure) | 30(A/m) | 4 |
| IEC 61000-4-11 | Dip | AC Power Port | - | - |
| Shock | IEC 60068-2-27 | | | |
| Drop | IEC 60068-2-32 | | | |
| Vibration | IEC 60068-2-64 | | | |
| RoHS | Yes | | | |
| MTBF | 11 years | | | |
| Warranty | 5 years | | | |

EH7506/EH7508/EH7512 mechanical dimensions (unit=mm)



The illustrated pictures include optional wall mount kit.

| Ordering Information | | | | | |
|----------------------|------------------------|----------------|-----|------------------|-----|
| Model Name | | Port Interface | | | |
| Without PROFINET | With PROFINET | Fast Ethernet | | Gigabit Ethernet | |
| | | Non-PoE | PoE | Combo Port | |
| | | | | RJ-45 | SFP |
| EH7506-2SFP | EH7506-2SFP-PR | 4 | - | - | 2 |
| EH7506-4PoE-2SFP | EH7506-4PoE-2SFP-PR | - | 4 | - | 2 |
| EH7508-4G-4SFP | EH7508-4G-4SFP-PR | 4 | - | (4) | (4) |
| EH7508-4G-4PoE-4SFP | EH7508-4G-4PoE-4SFP-PR | - | 4 | (4) | (4) |
| EH7512-4G-4SFP | EH7512-4G-4SFP-PR | 8 | - | (4) | (4) |
| EH7512-4G-4PoE-4SFP | EH7512-4G-4PoE-4SFP-PR | 4 | 4 | (4) | (4) |
| EH7512-4G-8PoE-4SFP | EH7512-4G-8PoE-4SFP-PR | - | 8 | (4) | (4) |

Note: Numbers in the parenthesis are the Combo ports.

| Optional Accessories | |
|--------------------------|-----------------------------------------------------------------------------------|
| WMK-450-Black | Metal Wall Mount Kit, Black |
| AD1120-48F | 120W/2.5A DIN-Rail 48 VDC power supply with universal 100~240VAC/120-370VDC input |
| AD1240-48C | 240W/5A DIN-Rail 48 VDC power supply with universal 100~240VAC/120-370VDC input |
| LM28-C3S-TI-N | SFP Transceiver, 1250Mbps, 850nmVCSEL, Multi-mode, 550m, 3.3V, -20~85°C |
| LM38-C3S-TI-N | SFP Transceiver, 1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C |
| LS38-C3S-TI-N | SFP Transceiver, 1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85°C |
| LS38-C3L-TI-N | SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85°C |
| CBL-RJ45(8P)-DB9(F)-90-C | 8-pin RJ45 to DB9 Female Cross Over Cable, 90cm |
| LM38-A3S-TI-N | SFP Transceiver, 155Mbps, 1310nmLED, Multi-mode, 2km, 3.3V, -40~85°C |
| LS38-A3S-TI-N | SFP Transceiver, 155Mbps, 1310nmFP, Single-mode, 30km, 3.3V, -40~85°C |

Note: Please choose a power supply wisely based on the actual power requirement. EH7512's system require 18W and each PoE port adds 15W for 802.3af or 30W for 802.3at.

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