# TN-5508-4PoE Series

**EN50155 8-port IEEE 802.3af PoE managed Ethernet switches**

## Features

- Advanced PoE management function
- Three rotary switches for setting the last 3 digits of the IP address makes maintenance even easier
- IPv6 Ready logo awarded (IPv6 Logo Committee certified)
- IEEE 1588 PTP (Precision Time Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different policies
- Modbus/TCP industrial Ethernet protocol supported
- Turbo Ring, Turbo Chain, and RSTP/STP (IEEE802.1w/D) for network redundancy
- IGMP snooping and GMRP for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- QoS (IEEE 802.1p/1Q and TOS/DiffServ) to increase determinism
- IEEE 802.3ad, LACP for optimum bandwidth utilization
- SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- SNMPv1/v2c/v3 for different levels of network management

- RMON for efficient network monitoring and proactive capability
- Bandwidth management prevents unpredictable network status
- Lock port allows access by only authorized MAC addresses
- Port mirroring for online debugging
- Automatic warning by exception through email, relay output
- Line-swap fast recovery
- Automatic recovery of connected device's IP addresses
- LLDP for automatic topology discovery in network management software
- Configurable by web browser, Telnet/serial console, and Windows utility
- Panel mounting or DIN-Rail mounting installation capability

## Specifications

| Specification | Description |
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| Technology | |

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| Standards | IEEE 802.3af for Power-over-Ethernet<br>IEEE 802.3 for 10BaseT<br>IEEE 802.3u for 100BaseT(X)<br>IEEE 802.3ab for 1000BaseT(X)<br>IEEE 802.3x for Flow Control<br>IEEE 802.1D for Spanning Tree Protocol<br>IEEE 802.1w for Rapid STP<br>IEEE 802.1Q for VLAN Tagging<br>IEEE 802.1p for Class of Service<br>IEEE 802.1X for Authentication<br>IEEE 802.3ad for Port Trunk with LACP |
| Protocols | IGMPv1/v2, GMRP, GVRP, SNMPv1/v2C/v3, DHCP Server/Client, DHCP Option 66/67/82, BootP, TFTP, SNTP, SMTP, RARP, RMON, HTTP, HTTPS, Telent, SSH, Syslog, LLDP, IEEE 1588 PTP,<br>Modbus/TCP, IPv6 |
| MIB | MIB-II, Ethernet-like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9 |
| Flow Control | IEEE802.3x flow control, back pressure flow control |
| Switch Properties | |
| Priority Queues | 4 |
| IGMP Groups | 256 |
| Max. Number of Available VLANs | 64 |
| VLAN ID Range | VID 1 to 4094 |
| Interface | |
| Fast Ethernet | Front cabling, M12 connector, 10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection |
| LED Indicators | 10/100M (fast Ethernet port), PoE |
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| Alarm Contact | 2 relay outputs in one M12 A-coding 5-pin male connector with current carrying capacity of 3 A @ 30 VDC |
| System LED Indicators | PWR1, PWR2, FAULT, MSTR/HEAD, CPLR/TAIL |
| Console Port | M12 A-coding 5-pin male connector |
| Rotary Switches | For setting the last 3 digits of the IP address |
| Physical Characteristics | |
| Housing | Metal, IP54 protection (with protective caps for all unused ports) |
| Dimensions | 185 x 170 x 110 mm (7.28 x 6.69 x 4.33 in) |
| Installation | Panel mounting, DIN-Rail mounting (with optional kit) |
| Environmental Limits | |
| Operating Temperature | Standard Models: 0 to 60°C (32 to 140°F)<br>Wide Temp. Models: -40 to 75°C (-40 to 167°F) |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Humidity | 5 to 95% RH (non-condensing) |
| Power Requirements | |
| Input Voltage | • 24 VDC (16.8 to 36 V)<br>• 48 VDC (46 to 50 V)<br>• 110/220 VDC/VAC (88 to 300 VDC, 85 to 264 VAC) |
| Input Current | Max. 3.5 A @ 24 VDC<br>Max. 1.8 A @ 48 VDC<br>Max. 0.92/0.47 A @ 110/220 VDC<br>Max. 0.77/0.39 A @ 110/220 VAC |
| Overload Current Protection | Present |
| Connection | M23 connector |

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| Reverse Polarity Protection | Present |
| Agency Approvals | |
| EMI | FCC Part 15, CISPR (EN55022) class A |
| EMS | EN61000-4-2 (ESD), Level 3<br>EN61000-4-3 (RS), Level 4<br>EN61000-4-4 (EFT), Level 3<br>EN61000-4-5 (Surge), Level 3<br>EN61000-4-6 (CS), Level 3<br>EN61000-4-8<br>EN61000-4-11<br>EN61000-4-12 |
| Safety | UL 508 (Pending) |
| Shock | IEC61373 |
| Freefall | IEC60068-2-32 |
| Vibration | IEC61373 |
| Traffic Control | NEMA TS2 (Pending) |
| Road Traffic | e-Mark (Pending) |
| Rail Traffic | (for panel mounting installations)<br>EN50155 (Pending), EN50121-3-2 (Pending),<br>EN50121-4 (Pending) |
| Warranty | |
| Warranty Period | 5 years |

# Order Information

| Model | Part # | Description |
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| **Standard Operating Temperature Models** | | |
| **TN-5508-4PoE-24** | TN-5508-4PoE-24 | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 24 VDC power inputs, 0 to 60°C operating temperature |
| **TN-5508-4PoE-48** | TN-5508-4PoE-48 | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 48 VDC power inputs, 0 to 60°C operating temperature |
| **TN-5508-4PoE-HV** | TN-5508-4PoE-HV | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 88 to 300 VDC power inputs, 0 to 60°C operating temperature |
| **Extended Operating Temperature Models** | | |
| **TN-5508-4PoE-24-T** | TN-5508-4PoE-24-T | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 24 VDC power inputs, -40 to 75°C operating temperature |
| **TN-5508-4PoE-48-T** | TN-5508-4PoE-48-T | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 48 VDC power inputs, -40 to 75°C operating temperature |
| **TN-5508-4PoE-HV-T** | TN-5508-4PoE-HV-T | Managed Ethernet switch with 4 10/100BaseT(X) ports and 4 PoE ports with M12 connectors, 88 to 300 VDC power inputs, -40 to 75°C operating temperature |
| **Network Management Software** | | |
| **MXview-50** | MXview-50 | Industrial network management software with a license for 50 nodes (by IP address) |
| **MXview-100** | MXview-100 | Industrial network management software with a license for 100 nodes (by IP address) |
| **MXview-250** | MXview-250 | Industrial network management software with a license for 250 nodes (by IP address) |
| **MXview-500** | MXview-500 | Industrial network management software with a license for 500 nodes (by IP address) |
| **MXview Upgrade-50** | MXview Upgrade-50 | License expansion of MXview industrial network |

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| | | management software by 50 nodes (by IP address) |
| **Accessories - SNMP OPC Server Pro Software** | | |
| **EDS-SNMP OPC Server Pro** | EDS-SNMP OPC Server Pro | OPC server for integrating SNMP devices into HMI/SCADA systems |
| **Connectors** | | |
| **M12A-5P-IP68** | M12A-5P-IP68 | Field-installable A-coded screw-in sensor connector, male |
| **M12D-4P-IP68** | M12D-4P-IP68 | Field-installable M-12 D-coded screw-in sensor connector, 4-pin male, IP68-rated |
| **Mounting Kits** | | |
| **DK-DC50131** | DK-DC50131 | Din-Rail mounting kit, 50 x 131 mm |
| **M12 Caps** | | |
| **A-CAP-M12F-M** | A-CAP-M12F-M | Metal cap to cover M12-female connector |
| **A-CAP-M12M-M** | A-CAP-M12M-M | Metal Cap for M12 Male Connector Male PIN |