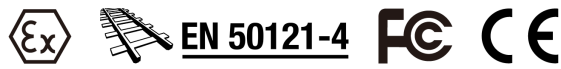# EDS-608 Series

8-port compact modular managed Ethernet switches

Features and Benefits

- Modular design with 4-port copper/fiber combinations

- Hot-swappable media modules for continuous operation

- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches)[1], and STP/RSTP/MSTP for network redundancy

- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security

- Easy network management by web browser, CLI, Telnet/serial console, Windows utility, and ABC-01

- Supports MXstudio for easy, visualized industrial network management

Certifications

Introduction

The versatile modular design of the compact EDS-608 Series allows users to combine fiber and copper modules to create switch solutions suitable for any automation network. The EDS-608's modular design lets you install 8 Fast Ethernet ports, and the advanced Turbo Ring and Turbo Chain (recovery time < 20 ms) technology, RSTP/STP, and MSTP help increase the reliability and availability of your industrial Ethernet network.

Models with an extended operating temperature range of -40 to 75°C are also available. The EDS-608 Series supports several reliable and intelligent functions, including EtherNet/IP, Modbus TCP, LLDP, DHCP Option 82, SNMP Inform, QoS, IGMP snooping, VLAN, TACACS+, IEEE 802.1X, HTTPS, SSH, SNMPv3, and more, making the Ethernet switches suitable for any harsh industrial environment.

Additional Features and Benefits

- Command line interface (CLI) for quickly configuring major managed functions
- SNMP Inform for ensuring reliable event management
- LLDP for automated topology discovery
- DHCP Option 82 for IP address assignment with different policies
- EtherNet/IP and Modbus TCP protocols for device management and monitoring
- Compatible with PROFINET protocol for transparent data transmission
- Automatic warning by exception through email and relay output

- 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
- Port Trunking for optimum bandwidth utilization
- SNMPv1/v2c/v3 for different levels of network management
- RMON for proactive and efficient network monitoring
- Bandwidth management to prevent unpredictable network status
- Lock port function for blocking unauthorized access based on MAC address
- Port mirroring for online debugging

Specifications

Input/Output Interface

Digital Inputs	+13 to +30 V for state 1 -30 to +3 V for state 0 Max. input current: 8 mA
Alarm Contact Channels	Relay output with current carrying capacity of 1 A @ 24 VDC

---

1.   If the port link speed is 1 Gigabit or higher, the recovery time is < 50 ms.

Ethernet Interface

Module	2 slots for any combination of 4-port interface modules, 10/100BaseT(X) or 100BaseFX
Standards	IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1X for authentication IEEE 802.3 for 10BaseT IEEE 802.3ad for Port Trunk with LACP IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control

Ethernet Software Features

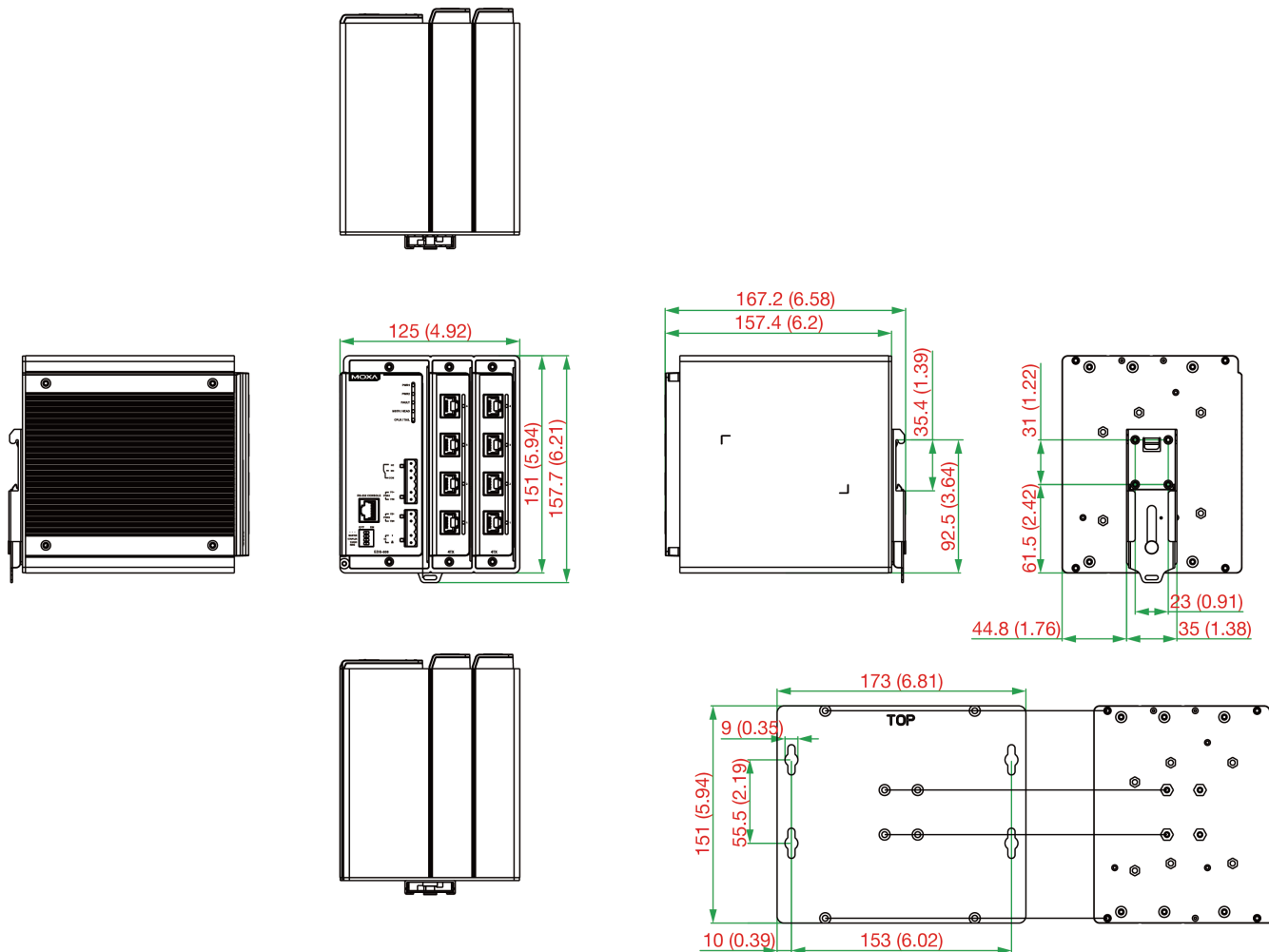|	
Filter	GMRP GVRP IGMP v1/v2 Port-based VLAN
Industrial Protocols	EtherNet/IP Modbus TCP
Management	Back Pressure Flow Control BOOTP DHCP Option 66/67/82 DHCP Server/Client Flow control IPv4/IPv6 LLDP Port Mirror RARP RMON SMTP SNMP Inform SNMPv1/v2c/v3 Syslog Telnet TFTP
MIB	Bridge MIB Ethernet-like MIB MIB-II P-BRIDGE MIB Q-BRIDGE MIB RMON MIB Groups 1, 2, 3, 9 RSTP MIB
Redundancy Protocols	Link Aggregation MSTP RSTP STP Turbo Chain Turbo Ring v1/v2
Security	Broadcast storm protection HTTPS/SSL Port Lock RADIUS SSH TACACS+
Time Management	NTP Server/Client SNTP

Switch Properties

IGMP Groups	256
MAC Table Size	8 K

Max. No. of VLANs	64
Packet Buffer Size	1 Mbits
Priority Queues	4
VLAN ID Range	VID 1 to 4094

LED Interface

LED Indicators	PWR1, PWR2, FAULT, MSTR/HEAD, CPLR/TAIL

Serial Interface

Console Port	RS-232 (TxD, RxD, GND), 10-pin RJ45 (115200, n, 8, 1)

DIP Switch Configuration

Ethernet Interface	Turbo Ring, Master, Coupler, Reserve

Power Parameters

Connection	1 removable 6-contact terminal block(s)
Input Voltage	12/24/48 VDC Redundant dual inputs
Input Current	1.5 A @ 12 VDC Note: These are the input current ratings for the device with the maximum number of modules installed.
Power Consumption (Max.)	18 W @ 12 VDC Note: These are the power consumption ratings for the device with the maximum number of modules installed.
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

Physical Characteristics

IP Rating	IP30
Dimensions	125 x 151 x 157.4 mm (4.92 x 5.95 x 6.20 in)
Weight	1,950 g (4.30 lb)
Installation	DIN-rail mounting Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	EDS-608: 0 to 60°C (32 to 140°F) EDS-608-T: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

Freefall	IEC 60068-2-32
EMC	EN 55032/35 EN 61000-6-2/-6-4
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m

	IEC 61000-4-4 EFT: Power: 4 kV; Signal: 4 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Hazardous Locations	ATEX Class I Division 2
Maritime	ABS DNV LR NK
Railway	EN 50121-4
Safety	UL 508
Shock	IEC 60068-2-27
Traffic Control	NEMA TS2
Vibration	IEC 60068-2-6

MTBF

Time	596,219 hrs
Standards	Telcordia (Bellcore), GB

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x EDS-608 Series switch
Cable	1 x RJ45-to-DB9 console cable
Documentation	1 x product certificates of quality inspection, Simplified Chinese 1 x product notice, Simplified Chinese 1 x quick installation guide 1 x warranty card
Note	Modules from the CM-600 Module Series need to be purchased separately for use with this product.

MOXA
Reliable Networks ▲ Sincere Service

Dimensions

Unit: mm (inch)

Ordering Information

Model Name	Layer	Total No. of Ports	Module 10/100BaseT(X) and/or 100BaseFX	Operating Temp.
EDS-608	2	8	2 slots for up to 8 10/100BaseT(X) and/or 100-BaseFX ports	0 to 60°C
EDS-608-T	2	8	2 slots for up to 8 10/100BaseT(X) and/or 100-BaseFX ports	-40 to 75°C

Accessories (sold separately)

CM-600 Module Series

CM-600-4TX	Fast Ethernet interface module with 4 10/100BaseT(X) ports, RJ45 connectors, -40 to 75°C operating temperature
CM-600-4MSC	Fast Ethernet interface module with 4 100BaseFX multi-mode ports, SC connectors, -40 to 75°C operating temperature
CM-600-4MST	Fast Ethernet interface module with 4 100BaseFX multi-mode ports, ST connectors, -40 to 75°C operating temperature
CM-600-4SSC	Fast Ethernet interface module with 4 100BaseFX single-mode ports, SC connectors, -40 to 75°C operating temperature
CM-600-3MSC/1TX	Fast Ethernet interface module with 1 10/100BaseT(X) port, RJ45 connector, and 3 100BaseFX multi-mode ports, SC connectors, -40 to 75°C operating temperature

CM-600-3SSC/1TX	Fast Ethernet interface module with 1 10/100BaseT(X) port, RJ45 connector, and 3 100BaseFX single-mode ports, SC connectors, -40 to 75°C operating temperature
CM-600-2MSC/2TX	Fast Ethernet interface module with 2 10/100BaseT(X) ports, RJ45 connectors, and 2 100BaseFX multi-mode ports, SC connectors, -40 to 75°C operating temperature
CM-600-2SSC/2TX	Fast Ethernet interface module with 2 10/100BaseT(X) ports, RJ45 connectors, and 2 100BaseFX single-mode ports, SC connectors, -40 to 75°C operating temperature

Storage Kits

ABC-01	Configuration backup and restoration tool for managed Ethernet switches and AWK Series wireless APs/bridges/clients, 0 to 60°C operating temperature

Power Supplies

HDR-60-24	60 W/2.5 A DIN-rail 24 VDC power supply, universal 85 to 264 VAC or 120 to 370 VDC input voltage, -30 to 70°C operating temperature
NDR-120-24	120 W/5.0 A DIN-rail 24 VDC power supply, universal 90 to 264 VAC or 127 to 370 VDC input voltage, -20 to 70°C operating temperature
MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

Wall-Mounting Kits

WK-75	Wall-mounting kit, 2 plates, 8 screws, 75 x 90 x 2.5 mm

Software

LIC-MXviewOne-NEW-XN-SR	MXview One node license with customizable node quantity (minimum 1 node)