

SDS-3008 Series

Industrial 8-port smart Ethernet switches



- > Compact and flexible housing design to fit into confined spaces
- > Web-based graphical user interface design for easy device configuration and management
- > EtherNet/IP, PROFINET, and Modbus/TCP industrial protocols supported for easy integration and monitoring in automation HMI/SCADA systems
- > Supports RSTP/STP for network redundancy
- > IEC 62443-4-2 Level 1 compliant to ensure device-level security



Introduction

The SDS-3008 smart Ethernet switch is the ideal product for IA engineers and automation machine builders to make their networks compatible with the vision of Industry 4.0. By breathing life into machines and control cabinets, the smart switch simplifies daily tasks with its easy configuration and easy installation. In addition, it is monitorable and is easy to maintain throughout the entire product

life cycle. The most frequently used automation protocols—including EtherNet/IP, PROFINET, and Modbus/TCP—are embedded in the SDS-3008 switch to provide enhanced operational performance and flexibility by making it controllable and visible from automation HMIs. It also supports a range of useful management functions, including IEEE 802.1Q VLAN, port mirroring, SNMP, and warning by relay.

Features and Benefits

- Web-based graphical user interface for quick configuration and management
- Supports EtherNet/IP, PROFINET, and Modbus/TCP industrial protocol profiles for easy device integration and monitoring in HMI/SCADA systems
- Supports IEEE 802.1D-2004 and IEEE 802.1w STP/RSTP for rapid network redundancy
- IEEE 802.1Q VLAN to ease network planning
- Unused port lock, SNMPv3 and HTTPS to enhance network security
- Role-based account management for self-defined administration and/or user accounts
- ABC-02 automatic backup configurator for quick event log and configuration backup. Can also enable quick device switch over and firmware upgrade
- Automatic warning by exception through relay output
- Local log and the ability to export inventory files ease inventory management

Specifications

Technology

Standards:

IEEE 802.3 for 10BaseT
 IEEE 802.3u for 100BaseT(X)
 IEEE 802.3x for Flow Control
 IEEE 802.1D-2004 for Spanning Tree Protocol
 IEEE 802.1w for Rapid STP
 IEEE 802.1Q for VLAN Tagging

Software Features

Management: IPv4/IPv6, SNMP v1/v2c/v3, LLDP, Port Mirror, DHCP Client, Syslog, SNMP Inform, Flow Control, Back Pressure Flow Control

Filter: IEEE 802.1Q VLAN

Redundancy Protocols: STP, RSTP

Security: Broadcast Storm Protection, Port Lock, SNMPv3, HTTPS

Time Management: SNTP/NTP Server/Client

Industrial Protocols: EtherNet/IP, PROFINET IO, and Modbus/TCP

MIB: RFC1213 MIB, Ether-Like MIB, IF MIB, LLDP-MIB, BRIDGE MIB, Q-BRIDGE MIB

Switch Properties

Max. Number of VLANs: 8

VLAN ID Range: VID 1 to 4094

MAC Table Size: 8 K

Packet Buffer Size: 3 Mbit

Interface

RJ45 Ports: 10/100BaseT(X) auto negotiation speed

Storage Port: USB storage (Type A connector for ABC-02-USB)

Alarm Contact: 1 relay output with current carrying capacity of 1 A @ 24 VDC

Digital Inputs: 1 input with the same ground, but electrically isolated from the electronics.

- +13 to +30 V for state "1"
- -30 to +3 V for state "0"
- Max. input current: 8 mA

Button: Reset button

Power Requirements

Input Voltage: 12/24/48/-48 VDC, redundant dual inputs
Operating Voltage: 9.6 to 60 VDC
Input Current: 0.55 A @ 24 V
Overload Current Protection: Supported
Connection: 2 removable 4-contact terminal blocks
Reverse Polarity Protection: Supported

Physical Characteristics

Housing: Metal
IP Rating: IP40
Dimensions: 20 x 135 x 111 mm (0.79 x 5.32 x 4.37 in)
Weight: 438 g (0.97 lb)
Installation: DIN-rail mounting

Environmental Limits

Operating Temperature:
 Standard Models: -10 to 60°C (14 to 140°F)
 Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 61010-2-201, EN 60950-1 (Preliminary)
EMC: EN 61000-6-2/6-4
EMI: CISPR 22, 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: 20 V/m
 IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV
 IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV
 IEC 61000-4-6 CS: Signal: 10 V
 IEC 61000-4-8 PFMF: 300A/m, 60 s
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
Note: Please check Moxa's website for the most up-to-date certification status.

MTBF (mean time between failures)

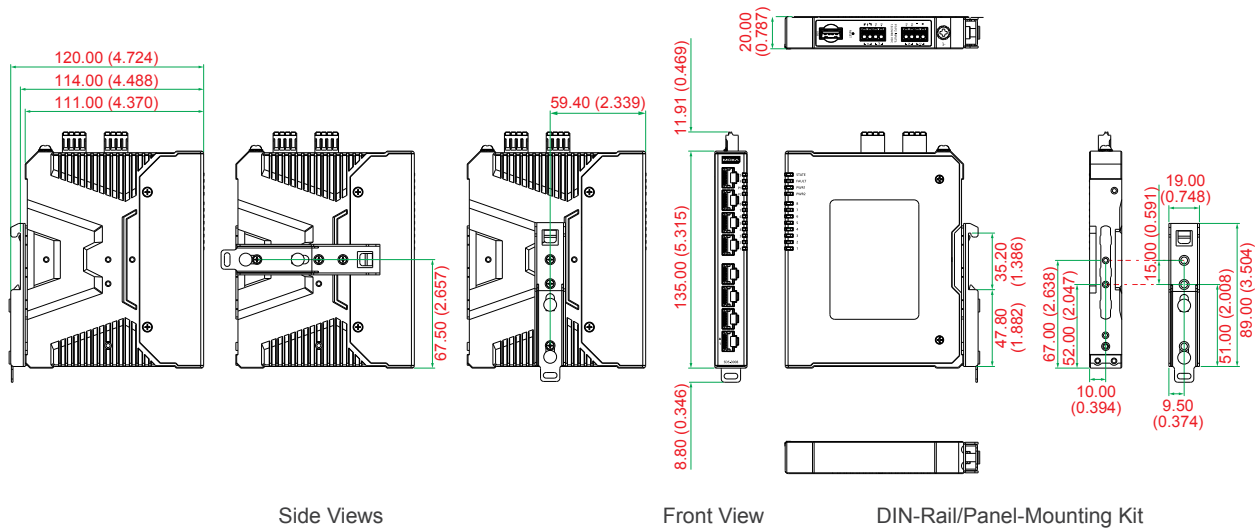
Time: 1,391,620 hours
Standard: Telcordia (Bellcore), GB

Warranty

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

Dimensions

Unit: mm (inch)



Ordering Information

Available Models		Port Interface
Standard Temperature (-10 to 60°C)	Wide Temperature (-40 to 75°C)	Fast Ethernet
SDS-3008	SDS-3008-T	10/100BaseT(X)
		8

Optional Accessories (can be purchased separately)

MXview: Moxa industrial network management software with 50, 100, 250, 500, 1000, or 2000 nodes
EDS-SNMP OPC Server Pro: OPC server software that works with all SNMP devices
ABC-02-USB: Configuration backup and restoration tool for managed Ethernet switches, 0 to 60°C operating temperature
DR-4524/75-24/120-24: 45/75/120 W DIN-rail 24 VDC power supplies
MDR-40-24/60-24: 40/60 W DIN-rail 24 VDC power supplies, -20 to 70°C operating temperature
RK-4U: 4U-high 19-inch rack-mounting kit

Package Checklist

- SDS-3008 switch
- Protective caps for unused ports
- Warranty card
- Quick installation guide (printed)