## EDS-309 Series

## Industrial 9-Port Unmanaged Ethernet Switches

## Highlights



Relay output warning for power failure and port break alarm
Redundant dual 24 VDC power inputs
>Broadcast storm protection
$>-40$ to $75^{\circ} \mathrm{C}$ operating temperature range (T models)
R Rugged hardware design well suited for industrial environments

## : Features

High Performance Network Switching Technology

- 10/100BaseT(X) (RJ45), 100BaseFX (SC/ST connector, Multi mode)
- Broadcast storm protection
- IEEE802.3/802.3u/802.3x support
- Store and Forward switching process type
- 10/100M, Ful//Half-Duplex, MDI/MDI-X auto sensing

Industrial Grade Reliability

- Power failure, port break alarm by relay output
- Redundant dual DC power inputs

Rugged Design

- Operating temperature range from 0 to $60^{\circ} \mathrm{C}$, or extended operating temperature from -40 to $75^{\circ} \mathrm{C}$
- IP30, rugged high-strength metal case
- DIN-Rail or panel mounting ability

Recommended Accessories

- DR Series DIN-Rail 24 VDC Power Supplies


## : Introduction

The EDS-309 series includes 9-port Ethernet switches with three Fiber ports that provide an economical solution for your industrial Ethernet connection, and the built-in relay warning function alerts maintainers when power failures or port breaks occur. The EDS-309 Series includes 2 models: one with an operating temperature range of 0 to
$60^{\circ} \mathrm{C}$, and the other one with extended operating temperature range of -40 to $75^{\circ} \mathrm{C}$. These 2 models are designed for standard and extended operating temperatures respectively, and go through a $100 \%$ burn-in test to ensure that they fulfill the special needs of industrial automation control.

## : Specifications

## Technology

Standards: IEEE802.3, 802.3u, 802.3x
Processing Type: Store and Forward
Flow Control: IEEE802.3x flow control, back pressure flow control

## Interface

RJ45 Ports: 10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection
Fiber Ports: 100BaseFX ports (SC/ST connector)
LED Indicators: Power, Fault, 10/100M (TP port), and 100M (Fiber port) DIP Switch: Port break alarm mask
Alarm Contact: One relay output with current carrying capacity of 1 A @ 24 VDC

## Optical Fiber

Distance:
Multi mode: 0 to $5 \mathrm{~km}, 1300 \mathrm{~nm}\left(50 / 125 \mu \mathrm{~m}, 800 \mathrm{MHz}^{*} \mathrm{~km}\right)$
Min. TX Output:
Multi mode : -20 dBm
Max. TX Output:
Multi mode: - 14 dBm
Sensitivity: -34 to -30 dBm
Power
Input Voltage: 24 VDC (12 to 48 VDC ), redundant inputs
Input Current (@ 24 VDC): 0.35A
Overload Current Protection: 1.6A
Connection: Removable 6-pin Terminal Block
Reverse Polarity Protection: Present

## Mechanical

Casing: IP30 protection, metal case
Dimensions (W x H x D): $53.6 \times 135 \times 105 \mathrm{~mm}$

$$
2.11 \times 5.31 \times 4.13 \text { in. }
$$

Weight: 630 g
Installation: DIN-Rail or Wall Mounting (optional kit)

## Environmental

## Operating Temperature:

0 to $60^{\circ} \mathrm{C}$ ( 32 to $140^{\circ} \mathrm{F}$ ),
-40 to $75^{\circ} \mathrm{C}\left(-40\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ for T models
Storage Temperature: -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $\left.185^{\circ} \mathrm{F}\right)$
Ambient Relative Humidity: 5 to 95\% (non-condensing)
Regulatory Approvals
Safety: UL508, UL60950-1, EN60950-1 (Pending)

## Hazardous location:

UL/cUL Class, Division 2, Groups A, B, C, and D
ATEX Class 1, Zone 2, EEx nC IIC (Pending)
EMI: FCC Part 15, CISPR (EN55022) class A
EMS: EN61000-4-2 (ESD), level 3
EN61000-4-3 (RS), level 3 EN61000-4-4 (EFT), level 3 EN61000-4-5 (Surge), level 3 EN61000-4-6 (CS), level 3

Shock: IEC60068-2-27
Free Fall: IEC60068-2-32
Vibration: IEC60068-2-6
Maritime: DNV, GL
*Please check MOXA's website for the most up-to-date certification status.

## Warranty

5 years

Dimensions (unit = mm)

## Ordering Information

## EDS-309-AA-BB-E

|  | Fiber Port | FO Connector | Operating Temperature |
| :---: | :---: | :---: | :---: |
| Ordering Code Definition | 3M: Three Multi Mode | SC: SC Connector ST: ST Connector | T: Operating Temp. -40 to $75^{\circ} \mathrm{C}$ <br> * Standard Models: 0 to $60^{\circ} \mathrm{C}$ |
| Available Models | Standard: <br> - EDS-309-3M-SC <br> - EDS-309-3M-ST |  | Wide Temperature: <br> - EDS-309-3M-SC-T <br> - EDS-309-3M-ST-T |
| Optional Accessories | - DR-4524: 45W/2A DIN-Rail 24 VDC Power Supply, 85 to 264 VAC input <br> - DR-75-24: 75W/3.2A DIN-Rail 24 VDC Power Supply, 85 to 264 VAC input <br> - DR-120-24: 120W/5A DIN-Rail 24 VDC Power Supply, 88 to 132 VAC/176 to 264 VAC input by switch <br> - WK-46: Wall Mounting Kit |  |  |

