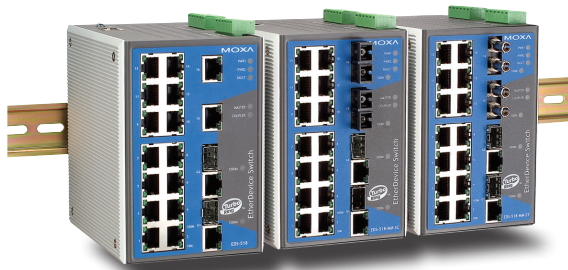


EDS-518A Series

16+2G-port Gigabit managed Ethernet switch



- > 2 Gigabit plus 16 fast Ethernet ports for copper and fiber
- > Turbo Ring (recovery time < 20 ms), RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy
- > QoS, IGMP snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > IEEE 802.1X, HTTPS, and SSH enhance network security
- > ABC-01 (Automatic Backup Configurator) for system configuration backup



Introduction

The EDS-518A is a standalone 18-port managed Ethernet switch that provides 2 combo Gigabit ports with built-in RJ45 or SFP slots for Gigabit optic communication. The Ethernet redundant Turbo Ring (recovery time < 20 ms) increases the reliability and speed of your

network backbone. The EDS-518A also supports intelligent network management functions, including QoS, IGMP snooping/GMRP, VLAN, Port Trunking, SNMPv1/v2c/v3, IEEE 802.1X, HTTPS, and SSH.

Features and Benefits

- Turbo Ring (recovery time < 20 ms at full load) and RSTP/STP (IEEE 802.1w/D)
- 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 and TOS/DiffServ to increase determinism
- Port Trunking for optimum bandwidth utilization
- 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
- ABC-01 (Automatic Backup Configurator) for system configuration backup
- Port mirroring for online debugging
- Automatic warning by exception through e-mail, relay output
- Digital inputs to integrate sensors and alarms with IP networks
- DIN-Rail or panel mounting capability

Specifications

Technology

Standards: IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X) and 100Base FX, IEEE 802.3ab for 1000BaseT(X), IEEE 802.3z for 1000BaseSX/LX/LHX/ZX, IEEE 802.3x for Flow Control, IEEE 802.1D for Spanning Tree Protocol, IEEE 802.1w for Rapid STP, IEEE 802.1Q for VLAN Tagging, IEEE 802.1p for Class of Service, IEEE 802.1X for Authentication, IEEE 802.3ad for Port Trunk with LACP

Protocols: IGMPv1/v2 device, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, DHCP Option 82, BootP, TFTP, SNMP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog

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: IEEE 802.3x flow control, back pressure flow control Interface

Switch Properties

Priority Queues: 4

Max. Number of Available VLANs: 64

VLAN ID Range: VID 1 to 4094

IGMP Groups: 256

Interface

RJ45 Ports: 10/100BaseT(X) or 10/100/1000BaseT(X) auto negotiation speed

Fiber Ports: 100BaseFX (SC/ST connector), and 1000BaseSFP slot

Console: RS-232 (RJ45)

LED Indicators: PWR1, PWR2, FAULT, 10/100M (TP port), 100M (Fiber port), MASTER, COUPLER

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

Digital Inputs: Two inputs with the same ground, but electrically isolated from the electronics.

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

Optical Fiber

	100BaseFX		
	Multi Mode	Single Mode	Single Mode, 80 km
Wavelength	1300 nm	1310 nm	1550 nm
Max. TX	-10 dBm	0 dBm	0 dBm
Min. TX	-20 dBm	-5 dBm	-5 dBm
RX Sensitivity	-32 dBm	-34 dBm	-34 dBm
Link Budget	12 dB	29 dB	29 dB
Typical Distance	5 km ^a 4 km ^b	40 km ^c	80 km ^d
Saturation	-6 dBm	-3 dBm	-3 dBm

- a. 50/125 μ m, 800 MHz*km fiber optic cable
- b. 62.5/125 μ m, 500 MHz*km fiber optic cable
- c. 9/125 μ m, 3.5 PS/(nm*km) fiber optic cable
- d. 9/125 μ m, 19 PS/(nm*km) fiber optic cable

Power Requirements

Input Voltage: 24 VDC (12 to 45 VDC), redundant dual inputs
Input Current (@ 24 V): 0.51A (EDS-518A), 0.61A (EDS-518A-MM, EDS-518A-SS)

Connection: Two removable 6-pin terminal blocks

Overload Current Protection: Present

Reverse Polarity Protection: Present

Physical Characteristics

Casing: IP30 protection, metal case

Dimensions (W x H x D): 94 x 135 x 142.7 mm (3.7 x 5.31 x 5.62 in.)

Weight: 1630 g

Installation: DIN-Rail mounting, wall mounting (optional kit)

Environmental Limits

Operating Temperature: 0 to 60°C (32 to 140°F)
 -40 to 75°C (-40 to 167°F) for T models

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

Safety: UL508, UL60950-1, CSA C22.2 No. 60950-1, EN60950-1

Hazardous Location:

UL/cUL Class I, Division 2, Groups A, B, C, and D (Pending);
 ATEX Class I, Zone 2, Ex nC IIC (Pending)

Maritime: DNV, GL

EMI: FCC Part 15, CISPR (EN55022) class A

EMS: EN61000-4-2 (ESD), level 2
 EN61000-4-3 (RS), level 3
 EN61000-4-4 (EFT), level 2
 EN61000-4-5 (Surge), level 3
 EN61000-4-6 (CS), level 3
 EN61000-4-8
 EN61000-4-11
 EN61000-4-12

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

MTBF: 240,000 hrs

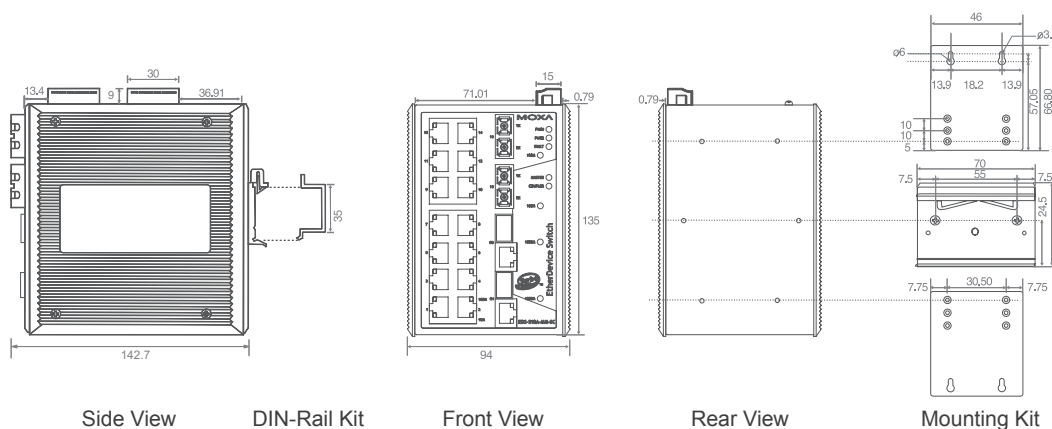
Database: Telcordia (Bellcore), GB

*Please check Moxa's website for the most up-to-date certification status.

Warranty

5 years (see www.moxa.com/warranty for details)

Dimensions (unit = mm)



Ordering Information

Product Model		Port Interface					
Standard Temperature (0 to 60°C)	Extended Temperature (-40 to 75°C)	Gigabit Ethernet	Fast Ethernet				
		Combo Port, 10/100/1000BaseT(X) or 1000BaseSFP*	10/100BaseT(X)	100BaseFX			
				Multi Mode, SC Connector	Multi Mode, ST Connector	Single Mode, SC Connector	Single Mode, SC Connector, 80 km
EDS-518A	EDS-518A-T	2	16				
EDS-518A-MM-SC	EDS-518A-MM-SC-T	2	14	2			
EDS-518A-MM-ST	EDS-518A-MM-ST-T	2	14		2		
EDS-518A-SS-SC	EDS-518A-SS-SC-T	2	14			2	
EDS-518A-SS-SC-80		2	14				2

* EDS-518A series supports 2 1000BaseSFP slots. Please see page 2-23 for the product information of SFP-1G series Gigabit Ethernet SFP modules.

Optional Accessories

- **ABC-01:** Industrial RS-232, RJ45-based, automatic backup configurator
- **EDS-SNMP OPC Server Pro:** CD with EDS-SNMP OPC server software and manual
- **DR-4524:** 45W/2A DIN-Rail 24 VDC power supply, 85 to 264 VAC input
- **DR-75-24:** 75W/3.2A DIN-Rail 24 VDC power supply, 85 to 264 VAC input
- **DR-120-24:** 120W/5A DIN-Rail 24 VDC power supply, 88 to 132 VAC/176 to 264 VAC input by switch
- **WK-46:** Wall mounting kit
- **RK-4U:** 4U-high 19" rack mounting kit