



**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

**Optical Fiber**

		100BaseFX		
		Multi-Mode		Single-Mode
Fiber Cable Type	OM1	50/125 μm	G.652	
		800 MHz*km	5 km	40 km
Typical Distance		4 km	5 km	40 km
Wave-length	Typical (nm)	1300		
	TX Range (nm)	1260 to 1360	1280 to 1340	
	RX Range (nm)	1100 to 1600	1100 to 1600	
Optical Power	TX Range (dBm)	-10 to -20	0 to -5	
	RX Range (dBm)	-3 to -32	-3 to -34	
	Link Budget (dB)	12	29	
	Dispersion Penalty (dB)	3	1	

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.

Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

**Power Requirements**

**Input Voltage:** 12/24/48/-48 VDC, redundant dual inputs

**Operating Voltage:** 9.6 to 60 VDC

**Input Current:**

EDS-518E-4GTXSFP: 0.37 A @ 24 V

EDS-518E-MM-ST/SC-4GTXSFP: 0.41 A @ 24 V

EDS-518E-SS-SC-4GTXSFP: 0.41 A @ 24 V

**Overload Current Protection:** Present

**Connection:** 2 removable 4-contact terminal blocks

**Reverse Polarity Protection:** Present

**Physical Characteristics**

**Housing:** Metal

**IP Rating:** IP30 protection

**Dimensions:** 94 x 135 x 137 mm (3.7 x 5.31 x 5.39 in)

**Weight:** 1,518 g (3.35 lb)

**Installation:** DIN-rail mounting, wall mounting (with optional kit)

**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**

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

**Safety:** UL 508

**Hazardous Location:** UL/cUL Class 1 Division 2 Groups A/B/C/D, ATEX Zone 2 Ex nA nC IIC

**EMC:** EN 61000-6-2/6-4

**EMI:** CISPR 22, FCC Part 15B Class A

**EMS:**

IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 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: 4 kV; Signal: 4 kV

IEC 61000-4-6 CS: Signal: 10 V

IEC 61000-4-8

**Electrical Substations:** IEC 61850-3, IEEE 1613

**Traffic Control:** NEMA TS2

**Rail Traffic:** EN 50121-4

**Marine:** DNV, ABS, LR, GL, NKK

**Shock:** IEC 60068-2-27

**Freefall:** IEC 60068-2-32

**Vibration:** IEC 60068-2-6

**MTBF** (mean time between failures)

**Time:** 723,953 hrs

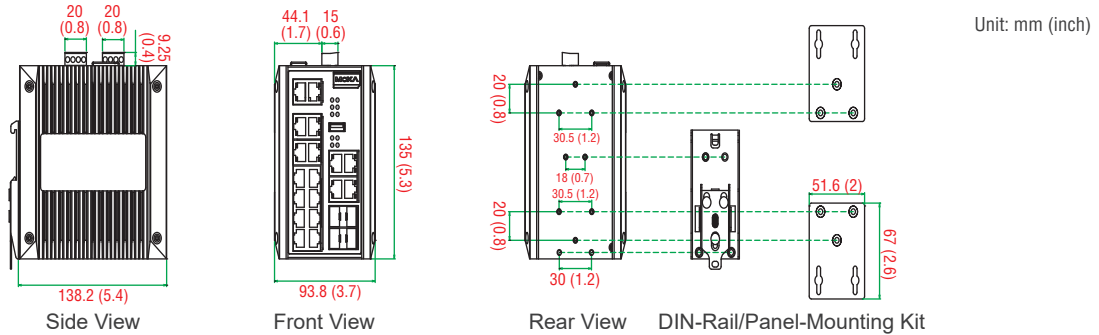
**Standard:** Telcordia (Bellcore), GB

**Warranty**

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions**



**Ordering Information**

Available Models		Total No. of Ports	Port Interface				
Standard Temperature (-10 to 60°C)	Wide Temperature (-40 to 75°C)		Gigabit Combo Port 10/100/1000BaseT(X) or 100/1000BaseSFP*	Fast Ethernet			
				10/ 100BaseT(X)	100BaseFX		
			Multi-Mode, SC Connector		Multi-Mode, ST Connector	Single-Mode, SC Connector	
EDS-518E-4GTXSFP	EDS-518E-4GTXSFP-T	18	4	14	-	-	-
EDS-518E-MM-SC-4GTXSFP	EDS-518E-MM-SC-4GTXSFP-T	18	4	12	2	-	-
EDS-518E-MM-ST-4GTXSFP	EDS-518E-MM-ST-4GTXSFP-T	18	4	12	-	2	-
EDS-518E-SS-SC-4GTXSFP	EDS-518E-SS-SC-4GTXSFP-T	18	4	12	-	-	2

\*The EDS-518E series supports 4 1000BaseSFP slots. See the SFP section for Gigabit Ethernet SFP module product information.

**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-T:** Configuration backup and restoration tool for managed Ethernet switches, -40 to 75°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

**WK-51-01:** Wall-mounting kit, 2 plates with 6 screws

**RK-4U:** 4U-high 19-inch rack-mounting kit

**Package Checklist**

- EDS-518E switch
- USB Cable: CBL-USBA/B-100
- Protective caps for unused ports
- Documentation and software CD
- Hardware installation guide (printed)
- Warranty card