EDS-2018-ML Series

16+2G-port Gigabit unmanaged Ethernet switches



Features and Benefits

- · 2 Gigabit uplinks with flexible interface design for high-bandwidth data aggregation
- · QoS supported to process critical data in heavy traffic
- · Relay output warning for power failure and port break alarm
- · IP30-rated metal housing
- Redundant dual 12/24/48 VDC power inputs
- -40 to 75°C operating temperature range (-T models)

Certifications









Introduction

The EDS-2018-ML series of industrial Ethernet switches have sixteen 10/100M copper ports and two 10/100/1000BaseT(X) or 100/1000BaseSFP combo ports, which are ideal for applications that require high-bandwidth data convergence. Moreover, to provide greater versatility for use with applications from different industries, the EDS-2018-ML Series also allows users to enable or disable the Quality of Service (QoS) function, broadcast storm protection, and port break alarm function with DIP switches on the outer panel.

The EDS-2018-ML Series has 12/24/48 VDC redundant power inputs, DIN-rail mounting, and high-level EMI/EMC capability. In addition to its compact size, the EDS-2018-ML Series has passed a 100% burn-in test to ensure it will function reliably in the field. The EDS-2018-ML Series has a standard operating temperature range of -10 to 60°C with wide-temperature (-40 to 75°C) models also available.

Specifications

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	16 Auto MDI/MDI-X connection Full/Half duplex mode Auto negotiation speed
Combo Ports (10/100/1000BaseT(X) or 100/ 1000BaseSFP+)	2 Auto negotiation speed Auto MDI/MDI-X connection Full/Half duplex mode
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseX IEEE 802.3x for flow control IEEE 802.1p for Class of Service
DIP Switch Configuration	
Ethernet Interface	Quality of Service (QoS), Broadcast storm protection, Port break alarm
Input/Output Interface	
Alarm Contact Channels	Relay output with current carrying capacity of 1 A @ 24 VDC



MAC Table Size 8 K Packet Buffer Size 4 Mbits Processing Type Store and Forward Power Parameters Connection 1 removable 6-contact terminal block(e) Input Current 0.277 A @ 24 VDC Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFPT: -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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A IEC 61000-4-2 ESD: Contact 6 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-2 ESD: Contact 5 kV; Air; 8 kV IEC 61000-4-3 ESD: Power 2 kV; Signal: 2 kV IEC 61000-4-3 ESD: Power 2 kV; Signal: 2 kV	Packet Buffer Size 4 4 Mbits Processing Type Store and Forward Power Parameters Connection 1 removable 6-contact terminal block(s) Input Current 0.277 A @ 24 VDC Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rall mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP:-10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-T: -40 to 75°C (-40 to 187°F) Storage Temperature (package included) -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 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 EFT: Power 2 kV; Signal: 2 kV	Switch Properties	
Processing Type	Processing Type	MAC Table Size	8 K
Power Parameters Connection 1 removable 6-contact terminal block(s) Input Current 0.277 A @ 24 VDC Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 ib) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1 (LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signat: 2 kV IEC 61000-4-5 Surge Signat: 2 kV IEC 61000-4-5 Surge Signat: 2 kV	Power Parameters	Packet Buffer Size	4 Mbits
Connection	Connection	Processing Type	Store and Forward
Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-3 RS: 80 MHz to 1 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signai: 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signai: 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signai: 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signai: 2 kV	Input Current 0.277 A € 24 VDC Input Voltage	Power Parameters	
Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-T40 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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 MHz; 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signat; 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signat; 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signat; 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signat; 2 kV	Input Voltage 12/24/48 VDC, Redundant dual inputs Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Proverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rall mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-20TXSFP-10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 EET; Power 2 kV; Signal: 2 kV IEC 61000-4-6 Stringe Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-6	Connection	1 removable 6-contact terminal block(s)
Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature Operating Temperature (package included) -40 to 85°C (14 to 140°F) EDS-2018-ML-2GTXSFPT: -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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-4 ETF: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 RS: 90 FMz: 2 kV; Signal: 2 kV IEC 61000-4-5 RS: 90 FMz: 2 kV; Signal: 2 kV	Operating Voltage 9.6 to 60 VDC Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rall mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP10 to 60°C (14 to 140°F)	Input Current	0.277 A @ 24 VDC
Overload Current Protection Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 RF: 20 kV; Signal: 2 kV IEC 61000-4-4 RF: 2 kV; Signal: 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV	Overload Current Protection Supported Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Unstallation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) Operating Temperature EDS-2018-ML-2GTXSFP-T: -40 to 76°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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air. 8 kV IEC 61000-4-2 ESD: Contact: 6 kV; Air. 8 kV IEC 61000-4-5 Surge; Power 2 kV; Signal: 2 kV IEC 61000-4-5 Surge; Power 2 kV; Signal: 2 kV IEC 61000-4-6 Sign V IEC 61000-4-8 FPMF Railway EN 50121-4 NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Input Voltage	12/24/48 VDC, Redundant dual inputs
Reverse Polarity Protection Supported Physical Characteristics Housing Metal IP Rating IP30 Dimensions S8 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEG 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 MHz: 20 V/m IEC 61000-4-3 RS: 80 MHz to 1 MHz: 20 V/m IEC 61000-4-3 ENT: Power: 2 kV; Signal: 2 kV IEC 61000-4-2 ENT: Power: 2 kV; Signal: 2 kV	Reverse Polarity Protection Supported	Operating Voltage	9.6 to 60 VDC
Physical Characteristics Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV	Physical Characteristics	Overload Current Protection	Supported
Housing Metal	Housing Metal IP Rating IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Coperating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1 (LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 CS: 10 V IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Shock IEC 60068-2-27	Reverse Polarity Protection	Supported
IP30 Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 BS: 80 MHz to 1 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV	IP Rating	Physical Characteristics	
Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in) Weight 683 g (1.51 lb) Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV	Dimensions 58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in)	Housing	Metal
Weight Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Weight Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 EMI CISPR 32, FCC Part 15B Class A EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-4 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	IP Rating	IP30
Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Installation DIN-rail mounting, Wall mounting (with optional kit) Environmental Limits Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-6 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Dimensions	58 x 135 x 95 mm (2.28 x 5.31 x 3.74 in)
Environmental Limits Operating Temperature	Environmental Limits	Weight	683 g (1.51 lb)
Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Operating Temperature EDS-2018-ML-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-2018-ML-2GTXSFP-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 UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 CS: 10 V IEC 61000-4-6 CS: 10 V IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Installation	DIN-rail mounting, Wall mounting (with optional kit)
EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	EDS-2018-ML-2GTXSFP-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 Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Environmental Limits	
Ambient Relative Humidity 5 to 95% (non-condensing) Standards and Certifications Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Ambient Relative Humidity 5 to 95% (non-condensing) Standards and Certifications Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 20 V/m IEC 61000-4-4 FFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-6 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Operating Temperature	
Standards and Certifications Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Standards and Certifications Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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 61000-4-8 PFMF Railway EN 50121-4 Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Safety UL 61010-2-201, EN 62368-1(LVD) EMC EN 55032/35 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 MHz: 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	Safety	Ambient Relative Humidity	5 to 95% (non-condensing)
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EMS IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 MHz: 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 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 MHz: 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: 10 V IEC 61000-4-8 PFMF Railway	EMC	EN 55032/35
IEC 61000-4-3 RS: 80 MHz to 1 MHz: 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 61000-4-3 RS: 80 MHz to 1 MHz: 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: 10 V IEC 61000-4-8 PFMF Railway	EMI	CISPR 32, FCC Part 15B Class A
	Traffic Control NEMA TS2 Vibration IEC 60068-2-6 Shock IEC 60068-2-27	EMS	IEC 61000-4-3 RS: 80 MHz to 1 MHz: 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: 10 V
Railway EN 50121-4	Vibration IEC 60068-2-6 Shock IEC 60068-2-27	Railway	EN 50121-4
Traffic Control NEMA TS2	Shock IEC 60068-2-27	Traffic Control	NEMA TS2
Vibration IEC 60068-2-6		Vibration	IEC 60068-2-6
Shock IEC 60068-2-27	Freefall IEC 60068-2-32	Shock	IEC 60068-2-27
Freefall IEC 60068-2-32		Freefall	IEC 60068-2-32

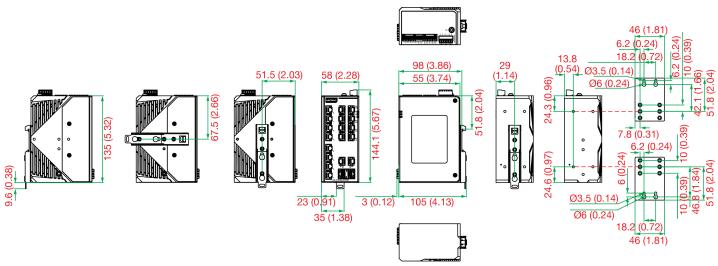


MTBF

Time	1,776,132 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x EDS-2018-ML Series switch
Installation Kit	2 x cap, plastic, for SFP port 4 x cap, plastic, for RJ45 port
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	10/100BaseT(X) Ports (RJ45 connector)	Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP+)	Operating Temp.
EDS-2018-ML-2GTXSFP	16	2	-10 to 60°C
EDS-2018-ML-2GTXSFP-T	16	2	-40 to 75°C

Accessories (sold separately)

SFP Modules

SFP-1FEMLC-T	SFP module with 1 100Base multi-mode, LC connector for 2/4 km transmission, -40 to 85°C operating temperature
SFP-1FESLC-T	SFP module with 1 100Base single-mode with LC connector for 40 km transmission, -40 to 85°C operating temperature
SFP-1FELLC-T	SFP module with 1 100Base single-mode with LC connector for 80 km transmission, -40 to 85°C operating temperature
SFP-1GTXRJ45-T	SFP module with 1 1000BaseT port with RJ45 connector for 100 m transmission, -40 to 75° C operating temperature



SFP-1GSXLC	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, 0 to 60° C operating temperature
SFP-1GSXLC-T	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, -40 to 85°C operating temperature
SFP-1GLSXLC	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, 0 to 60°C operating temperature
SFP-1GLSXLC-T	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, -40 to 85°C operating temperature
SFP-1GLXLC	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, 0 to 60°C operating temperature
SFP-1GLXLC-T	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85° C operating temperature
SFP-1GLHLC	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, 0 to 60°C operating temperature
SFP-1GLHLC-T	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, -40 to 85° C operating temperature
SFP-1GLHXLC	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, 0 to 60°C operating temperature
SFP-1GLHXLC-T	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, -40 to 85°C operating temperature
SFP-1GZXLC	SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, 0 to 60°C operating temperature
SFP-1GZXLC-T	SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, -40 to 85° C operating temperature
SFP-1GEZXLC	SFP module with 1 1000BaseEZX port with LC connector for 110 km transmission, 0 to 60° C operating temperature
SFP-1GEZXLC-120	SFP module with 1 1000BaseEZX port with LC connector for 120 km transmission, 0 to 60° C operating temperature
SFP-1G10ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature
SFP-1G10ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature
SFP-1G10BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60° C operating temperature
SFP-1G10BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1G20BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60° C operating temperature
SFP-1G20ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature
SFP-1G20ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60° C operating temperature
SFP-1G20BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1G40BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature
SFP-1G40BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1G40ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60° C operating temperature
SFP-1G40ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature

Power Supplies

DR-4524 45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50° C operating temperature



DR-75-24	75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60° C operating temperature
DR-120-24	120W/2.5A DIN-rail 24 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°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

Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit

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