

EDS-G205A-4PoE Series

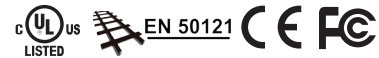
▶ Award-winning Product



**5-port full Gigabit unmanaged Ethernet switches
with 4 IEEE 802.3af/at PoE+ ports**



- > Full Gigabit Ethernet ports
- > IEEE 802.3af/at, PoE+ standards
- > Up to 30 watts output per PoE port
- > 24/48 VDC flexible redundant power inputs
- > Supports 9.6 KB jumbo frames
- > Intelligent power consumption detection and classification
- > Smart PoE over current and short circuit protection
- > -40 to 75°C operating temperature range (T models)



Introduction

The EDS-G205A-4PoE switches are smart, 5-port, unmanaged full Gigabit Ethernet switches supporting Power-over-Ethernet on ports 2 to 5. The switches are classified as power source equipment (PSE), and when used in this way, the EDS-G205A-4PoE switches enable centralization of the power supply, providing up to 30 watts of power per port and reducing the effort needed for installing power. The

switches can be used to power IEEE 802.3af/at standard devices (PD), eliminating the need for additional wiring, and they support IEEE 802.3/802.3u/802.3x with 10/100/1000M, full/half-duplex, MDI/MDI-X auto-sensing to provide an economical high-bandwidth solution for your industrial Ethernet network.

Specifications

Technology

Standards:

IEEE 802.3af/at for Power-over-Ethernet
IEEE 802.3 for 10BaseT
IEEE 802.3u for 100BaseT(X)
IEEE 802.3ab for 1000BaseT
IEEE 802.3z for 1000BaseX
IEEE 802.3x for Flow Control

Processing Type: Store and Forward

Switch Properties

MAC Table Size: 8 K

Packet Buffer Size: 136 KB

Jumbo Frame Size: 9.6 KB

Interface

Fiber Port: 1000BaseSFP slot

RJ45 Ports: 10/100/1000BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection

PoE Pinout: V+, V+, V-, V- for Pin 1,2,3,6 (Endspan, MDI Alternative A)

LED Indicators: P1, P2, 10/100/1000M, PoE

Power Requirements

Input Voltage: 24/48 VDC, redundant dual inputs

Input Current: Max 7.5 A @ 24 VDC (supports up to 4 ports at 30 watts per PoE port)

Overload Current Protection: Present

Connection: 2 removable 2-contact terminal blocks

Reverse Polarity Protection: Present

Physical Characteristics

Housing: Metal, IP30 protection

Dimensions: 29 x 135 x 105 mm (1.14 x 5.31 x 4.13 in)

Weight: 300 g

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

Environmental Limits

Operating Temperature:

Standard Models: 0 to 60°C (32 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 508

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3,

EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 4,

EN 61000-4-6 (CS) Level 3, EN 61000-4-8

Rail Traffic: EN 50121-4

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.

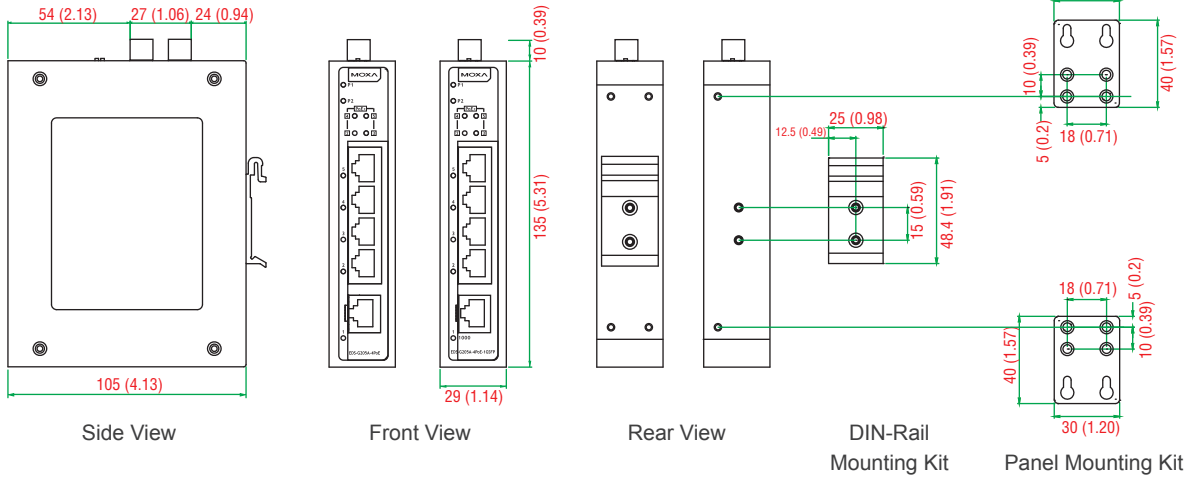
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models		Port Interface		
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100/1000BaseT(X)	1000BaseSFP*	PoE/PoE+, 10/100/1000BaseT(X)
EDS-G205A-4PoE	EDS-G205A-4PoE-T	5	—	4
EDS-G205A-4PoE-1GSFP	EDS-G205A-4PoE-1GSFP-T	4	1	4

*See the SFP-1G datasheet for SFP module product information.

Optional Accessories (can be purchased separately)

DR-75-24/120-24: 75/120 W DIN-rail 24 VDC power supplies

DR-75-48/120-48: 75/120 W DIN-rail 48 VDC power supplies

DRP-240-48: 240 W DIN-rail 48 VDC power supplies

WK-30: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit

Package Checklist

- EDS-G205A-4PoE switch
- Hardware installation guide (printed)
- Warranty card

SFP-1G Series

1-port Gigabit Ethernet SFP modules



- > IEEE 802.3z compliant
- > Differential LVPECL inputs and outputs
- > TTL signal detect indicator
- > Hot pluggable LC duplex connector
- > Class 1 laser product, complies with EN 60825-1



: Specifications

Interface

Ethernet Ports: 1

Connectors: Duplex LC Connector or Simplex LC Connector (WDM-type only)

Note: WDM-type SFP modules must be used in pairs (e.g., SFP-1G10ALC and SFP-1G10BLC)

Note: When connecting long distance SFP (SFP-ZX, EZX or EZX-120), please ensure at least 5 dB attenuation between both ends. Without attenuation, excessive optical power may damage the transceivers.

Optical Fiber

	Gigabit Ethernet													
	SFP-SX	SFP-LSX	SFP-LX	SFP-LH	SFP-LHX	SFP-ZX	SFP-EZX	SFP-EZX-120	SFP-10A	SFP-10B	SFP-20A	SFP-20B	SFP-40A	SFP-40B
Wavelength	850 nm	1310 nm	1310 nm	1310 nm	1310 nm	1550 nm	1550 nm	1550 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
Max. TX	-4 dBm	-1 dBm	-3 dBm	-2 dBm	1 dBm	5 dBm	5 dBm	3 dBm	-3 dBm	-3 dBm	-2 dBm	-2 dBm	2 dBm	2 dBm
Min. TX	-9.5 dBm	-9 dBm	-9.5 dBm	-8 dBm	-4 dBm	0 dBm	0 dBm	-2 dBm	-9 dBm	-9 dBm	-8 dBm	-8 dBm	-3 dBm	-3 dBm
RX Sensitivity	-18 dBm	-19 dBm	-20 dBm	-23 dBm	-24 dBm	-24 dBm	-30 dBm	-33 dBm	-21 dBm	-21 dBm	-23 dBm	-23 dBm	-23 dBm	-23 dBm
Link Budget	8.5 dB	10 dB	10.5 dB	15 dB	20 dB	24 dB	30 dB	31 dB	12 dB	12 dB	15 dB	15 dB	20 dB	20 dB
Typical Distance	550 m ^a	2 km ^b	10 km ^c	30 km ^c	40 km ^c	80 km ^c	110 km ^c	120 km ^c	10 km ^c	10 km ^c	20 km ^c	20 km ^c	40 km ^c	40 km ^c
Saturation	0 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-8 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm

a. 50/125 μm, 400 MHz-km or 62.5/125 μm, 500 MHz-km @ 850 nm multi-mode fiber optic cable

b. 62.5/125 μm, 750 MHz-km @ 1310 nm multi-mode fiber optic cable

c. 9/125 μm single-mode fiber optic cable

Note: The actual communication distance depends on many factors, including connector loss, cable deployment, and the age of the cabling system. We recommend doing a link budget analysis and reserving a 3 dB margin for such factors.

Environmental Limits

Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)

Wide Temp. Models: -40 to 85°C (-40 to 185°F)

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

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

Standards and Certifications

Safety: UL 60950-1, TÜV

Warranty

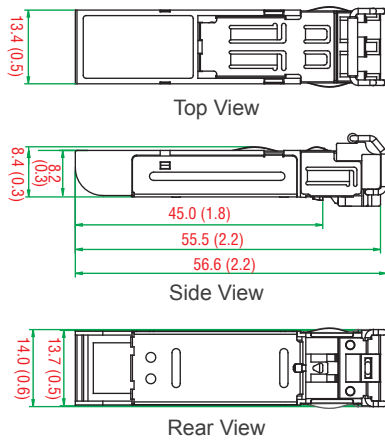
Warranty Period: 5 years

Details: See www.moxa.com/warranty

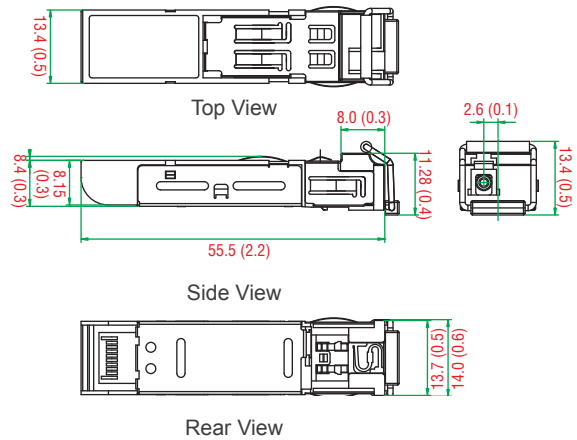
Dimensions

Unit: mm (inch)

SFP-1G Series



SFP-1G Series (WDM Type)



: Ordering Information

SFP Modules

Available Models		Port Interface							
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 85°C)	1000BaseSX, LC Connector, 0.5 km	1000BaseLSX, LC Connector, 2 km	1000BaseLX, LC Connector, 10 km	1000BaseLH, LC Connector, 30 km	1000BaseLHX, LC Connector, 40 km	1000BaseZX, LC Connector, 80 km	1000BaseZX, LC Connector, 110 km	1000BaseZX, LC Connector, 120 km
SFP-1GSXLC	SFP-1GSXLC-T*	1	–	–	–	–	–	–	–
SFP-1GLSXL	SFP-1GLSXL-T	–	1	–	–	–	–	–	–
SFP-1GLXL	SFP-1GLXL-T	–	–	1	–	–	–	–	–
SFP-1GLHL	SFP-1GLHL-T	–	–	–	1	–	–	–	–
SFP-1GLHXL	SFP-1GLHXL-T	–	–	–	–	1	–	–	–
SFP-1GZXL	SFP-1GZXL-T	–	–	–	–	–	1	–	–
SFP-1GEZXL	–	–	–	–	–	–	–	1	–
SFP-1GEZXL-120	–	–	–	–	–	–	–	–	1

*SFP-1GSXLC-T: -20 to 75°C operating temperature

WDM-type (BiDi) SFP Modules

Available Models		Port Interface					
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 85°C)	1000BaseSFP, LC Connector, 10 km		1000BaseSFP, LC Connector, 20 km		1000BaseSFP, LC Connector, 40 km	
		TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
SFP-1G10ALC	SFP-1G10ALC-T	1	–	–	–	–	–
SFP-1G10BLC	SFP-1G10BLC-T	–	1	–	–	–	–
SFP-1G20ALC	SFP-1G20ALC-T	–	–	1	–	–	–
SFP-1G20BLC	SFP-1G20BLC-T	–	–	–	1	–	–
SFP-1G40ALC	SFP-1G40ALC-T	–	–	–	–	1	–
SFP-1G40BLC	SFP-1G40BLC-T	–	–	–	–	–	1

Available Models

The SFP-1G series modules can be used with the following products:

ICS-G7850A/G7852A series, ICS-G7850/G7852 series, ICS-G7750A/G7752A series, ICS-G7750/G7752 series, IM-G7000A-4GSFP, IM-G7000-4GSFP, ICS-G7826A/G7828A series, ICS-G7826/G7828 series, ICS-G7526A/G7528A series, ICS-G7526/G7528 series, IKS-G6524A/G6824A series, IKS-G6524/G6824 series, IKS-G726A/G728A series, IKS-G726/G728 series, IM-2GSFP, EDS-611/619 series, EDS-G516E series, EDS-G512E series, EDS-G509 series, EDS-518A series, EDS-510A series, EDS-510E series, EDS-G308 series, EDS-210A series, IKS-6728A-8PoE series, IKS-6728-8PoE series, EDS-P510A-8PoE series, EDS-P510 series, EDS-G205A-4PoE series, PM-7200-2G/4G series, PT-G7509 series, IMC-101G series, EDR-G903/G902 series, EDR-810 series

Package Checklist

- SFP-1G module
- Warranty card