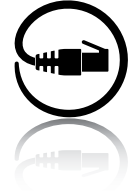


Stride SE2 Series Managed Industrial Ethernet Switches



RoHS Compliant

Stride SE2 Series Managed Models				
Part Number	Price	Ethernet Ports	Fiber Ports	Input Power (max)
SE2-SW8M		8	–	8.1 W
SE2-SW8M-2P		6	2 GbE SFP*	9.1 W
SE2-SW8M-2C1			2 SC	8.1 W
SE2-SW8M-2T1			2 ST	
SE2-SW16M		16	–	18W
SE2-SW18MG-2P	1.00	16, 2 GbE combo	2 GbE SFP combo*	

**Optional SFP modules sold separately.*

Features

- Modbus TCP management capability
- EtherNet/IP management capability
- Wide temp range
- DIN-rail mount with optional panel mount accessory
- Metal housing
- 12, 24 VDC redundant input
- Gigabit Ethernet (GbE) models
- Haz Loc
- 5-year warranty

Panel Mounting Brackets

Stride SE2 series DIN-rail mounted switches can be panel mounted with the addition of the optional panel mounting brackets SE2-PM1 or SE2-PM3.



SE2-Series Panel Mounting Brackets		
Part Number	Price	For use with switch model
SE2-PM1		SE2-SW5Ux, SE2-SW8U-x, and SE2-MCx
SE2-PM3		SE2-SWPx, SE2-SW8UG-T, SE2-SW10UG-2P-T, SE2-SW16U-T, SE2-SW18U-2G-T and all SE2 managed switches

Stride SE2 Series Managed Industrial Ethernet Switches

Specifications

General Specifications	
Operating Mode	Store and forward wire speed switching, non-blocking
Devices Supported	All IEEE 802.3 compliant devices are supported
MAC Addresses	8K 16K for SE2-SW8M-2P
Ethernet Protocols Supported	SNMPv1 / v2 / v3, RMON, DHCP, SNMP, TFTP, STP, RSTP, QoS / DS, IGMPv1 / v2, VLAN (tag and port based), HTTP, HTTPS (SSL and TLS), Telnet, SSH and more
Industrial Protocols Supported	Modbus TCP, EtherNet/IP, PROFINet, Foundation Fieldbus HSE and others
Packet Forwarding Rate	1.4 Mpps – SE2-SW8M 1.4 Mpps–SE2-SW8M-2C1 1.4 Mpps–SE2-SW8M-2T1 5.5 Mpps–SE2-SW8M-2P 5.4 Mpps–SE2-SW16M 5.4 Mpps–SE2-SW18MG-2P
Latency	< 10 µs
Operating Temperature Range	-40 to +75°C (-40 to +167°F)
Storage Temperature Range	-40 to +85°C (-40 to +185°F)
Humidity (non-condensing)	5 to 95% RH
Environmental Air	No corrosive gases permitted
Vibration, Shock & Freefall	IEC60068-2-6, -27, -32
EMI Emissions	FCC CFR47 Part 15, EN55032/CISPR32, Class A
EMS	IEC61000-4-2 (ESD): ± 8kV (contact), ± 15kV (air) IEC61000-4-3 (RS): 10V/m (80MHz ~ 2GHz) IEC61000-4-4 (EFT): Power Port ± 4kV; Data Port: ± 2kV IEC61000-4-5 (Surge): Power Port: ± 2kV/DM, ± 4kV/CM; Data Port ± 2kV IEC61000-4-6 (CS): 10V (150kHz ~ 80MHz)
RoHS and WEEE	RoHS (Pb free) and WEEE compliant
Packaging and Protection	Metal case, IP40
Hazardous Locations	ANSI/ISA 12.12.01-2015 & CSA22.2 No. 213-15 (Class I, Div.2) (file #E200031)
Agency Approvals	UL/cUL 508, CE

SC or ST Fiber Port: (100BaseFX multimode)	
100BaseFX Ports	2
Fiber Port Connector	ST or SC, by model
Optimal Fiber Cable	50/125 or 62.5/125 µm
Center Wavelength	1300 nm
Multimode	Links up to 4 km typ.; > Transmitter power (dBm): -21 min, -17 typ, -14 max > Receiver sensitivity (dBm): -34 typ, -31 max
Nominal Max. Distance (full duplex)	4 km
Eye Safety (laser)	IEC 60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11

RJ45 Ports	
Port Type	Shielded RJ45
Ethernet Compliance	IEEE 802.3i, 802.3u, 802.3x for 10/100 Ethernet IEEE 802.3ab, 802.3z for Gigabit Ethernet
Auto-Crossover	Yes, allows you to use straight-through or crossover wired cables
Auto-Sensing Operation	Yes, full and half duplex
Auto-Negotiating Speed	Yes
Flow Control	Automatic
Cable Requirements	Twisted pair (Cat5e or better) (shielded recommended)
Max. Cable Distance	100 meters

SFP Ports	
SFP (pluggable) ports accept Mini-GBIC (SFP) transceivers with a speed of 1000Mbps or 100Mbps	
See SFP datasheet for optional fiber transceiver specification	

Console ports: USB	
Management Interfaces	Browser,Text (Telnet and SSH), CLI (command line interface) and SNMP (see the user manual for supported MIBs)

Power Details	
Power Input	Redundant Input Terminals
Input Voltage	Class 2 Power Supply: 12-24 VDC
Reverse Power Protection	Yes
Wire Size and Torque	18-12 AWG, max wire length 3m (9.84 ft); Wire strip length 7mm; Torque: 3.5 lb-in (0.4 N-m)
Power Consumption	Refer to Stride SE2 Series Managed Models table

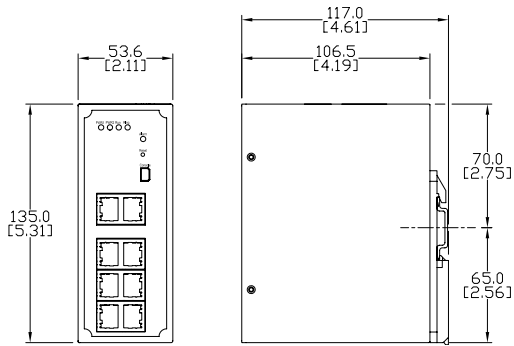
Stride SE2 Series Managed Industrial Ethernet Switches

SE2 Series DIN Rail mounted switches

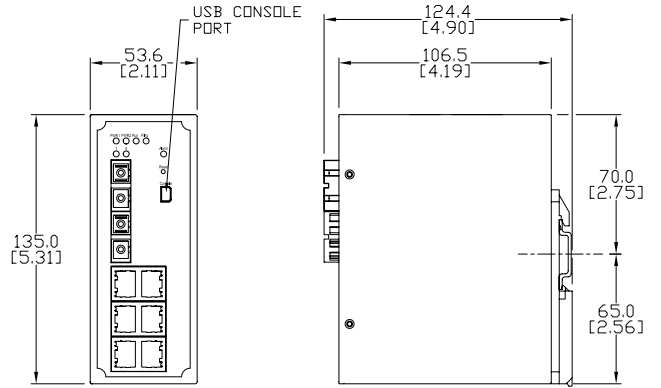
Allow 20mm (0.79") clearance around the switch for cooling

Dimensions

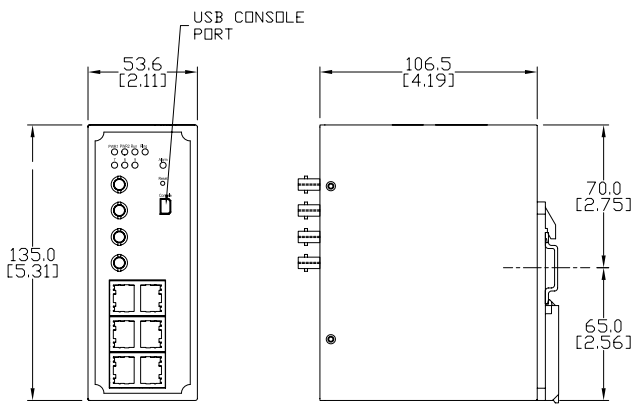
mm [inches]



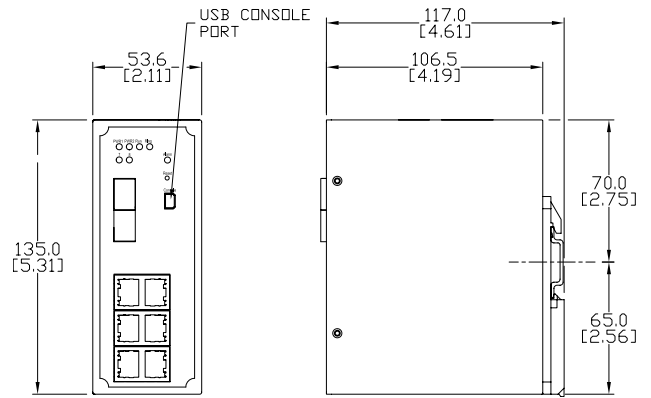
SE2-SW8M



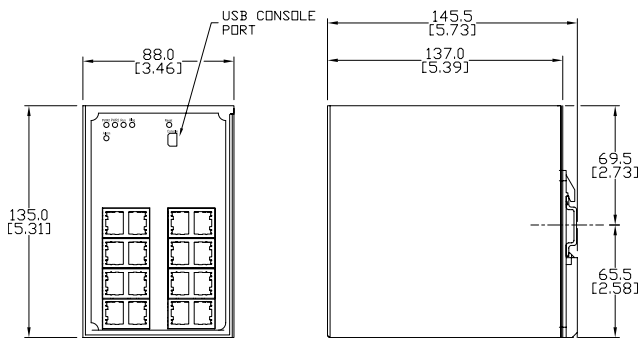
SE2-SW8M-2C1



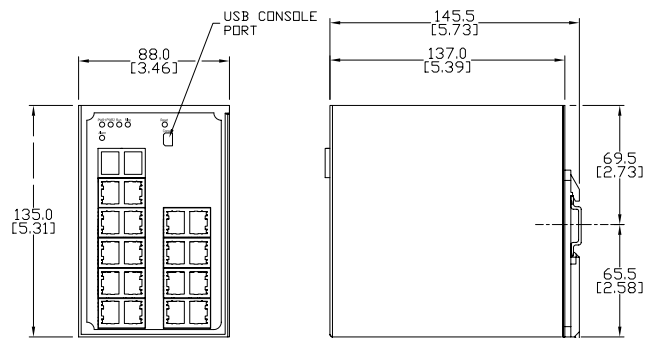
SE2-SW8M-2T1



SE2-SW8M-2P



SE2-SW16M



SE2-SW18MG-2P

See our website: for complete engineering drawings.

Stride Industrial Ethernet Fiber Transceivers

Fast Ethernet

Description:

STRIDE 100Mb Small Form Factor Pluggable (SFP) transceiver modules (Transmit/Receive). Hot Swappable. 1310nm wavelength. Data transmission up to 4km multimode fiber (SFP-4K-FMF) or 30km singlemode fiber (SFP-30K-FSF). LC duplex receptacle, SFP Multi-Source Agreement compliant.



NOTE: PORT SPEED SETTINGS FOR THE STRIDE SWITCH MUST BE MANUALLY SET TO 100 MBPS.

Part Number	Mode	Light Source	Max Trans. Distance	Price
SFP-4K-FMF	Multi-mode	1310 nm, FP	4km	
SFP-30K-FSF	Single-mode		30 km	

Note: Use only Gigabit speed SFPs with SE2-SW10UG-2P-T

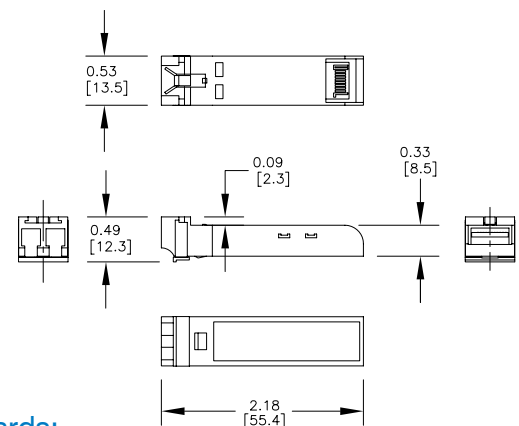
Transmitter Optical characteristics				
Parameter (unit)		Minimum	Typical	Maximum
Output optical power (dBm)	SFP-4K-FMF	-9		0
	SFP-30K-FSF	-15		-8
Extinction Ratio (dB)	SFP-4K-FMF	8.2		
	SFP-30K-FSF			
Center Wavelength (nm)	SFP-4K-FMF	1261	1310	1360
	SFP-30K-FSF			
Spectral width - RMS (nm)	SFP-4K-FMF			7
	SFP-30K-FSF			4
Rise / Fall Time - 10% - 90% (ns)	SFP-4K-FMF			2
	SFP-30K-FSF			

Receiver Optical characteristics			
Parameter (unit)		Minimum	Maximum
Sensitivity (dBm)	SFP-4K-FMF		-30
	SFP-30K-FSF		-34
Operating Wavelength (nm)	SFP-4K-FMF	1260	1620
	SFP-30K-FSF		
Loss of Signal - Deasserted (dBm)	SFP-4K-FMF		-30
	SFP-30K-FSF		-35
Loss of Signal - Asserted (dBm)	SFP-4K-FMF	-45	
	SFP-30K-FSF		
Loss of Signal - Hysteresis (dB)	SFP-4K-FMF	0.5	
	SFP-30K-FSF		

General Specifications		
Connector Type	Type LC connector with bail latch	
Operating Temperature range	-40 to +85 °C (-40 to +185 °F)	
Storage temperature range	-40 to +85 °C (-40 to +185 °F)	
Humidity (non-condensing)	5 to 95% RH	
Link Speed	Gigabit Ethernet	
Laser Type	FP laser diode (Class 1 laser safety standard IEC 60825 compliant)	
Media	SFP-4K-FMF	Multi-mode Fiber
	SFP-30K-FSF	Single-mode Fiber
Fiber	SFP-4K-FMF	62.5 / 125 µm
	SFP-30K-FSF	9 / 125 µm
Code	SFP-4K-FMF	FX5
	SFP-30K-FSF	100LX
Distance	SFP-4K-FMF	4km
	SFP-30K-FSF	30 km
Compliances	SFP-4K-FMF	125Mbps IEEE802.3u 100BASE-FX compliant 125Mbps FDDI ISO/IEC 9314-1 compliant
	SFP-30K-FSF	125Mbps IEEE802.3ah 100BASE-LX10 compliant 155Mbps ITU-T G957 STM S-1.1/L-1.1 compliant 155Mbps SONET OC-3 IR-1/LR-1 compliant
Inputs / Outputs	AC-coupled differential inputs and outputs	

Dimensions

Inches [mm]



Safety Standards:



Stride Industrial Ethernet Fiber Transceivers Gigabit Ethernet

Description:

STRIDE Gigabit (1.25GB) Small Form Factor Pluggable (SFP) transceiver module (Transmit/Receive). Hot Swappable. Short or long wavelength of 850nm or 1310nm, dependant on model. Supports data transmission up to 550 meters, 2km, 10 km, or 30 km on a single-mode or multi-mode fiber, dependant on model. LC duplex receptacle, SFP Multi-Source Agreement compliant.



Part Number	Mode	Light Source	Max Trans. Distance	Price
SFP-500-GMF	Multi-mode	850 nm, VCSEL	550m	
SFP-2K-GMF				
SFP-10K-GSF	Single-mode	1310 nm, FP	10 km	
SFP-30K-GSF				
		1310 nm, DFB	30 km	

Note: Use only Gigabit speed SFPs with SE2-SW10UG-2P-T

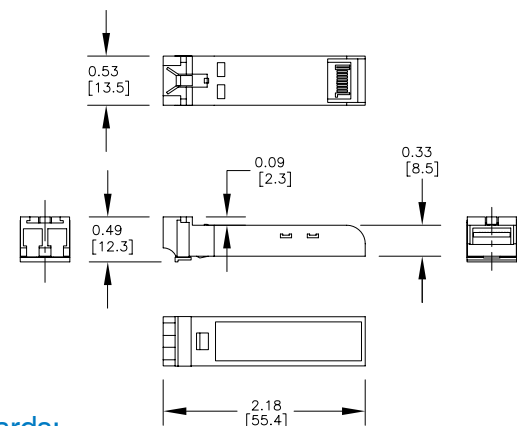
Transmitter Optical characteristics				
Parameter (unit)		Minimum	Typical	Maximum
Output optical power (dBm)	SFP-500-GMF	-9.5		-4
	SFP-2K-GMF	-9		-1
	SFP-10K-GSF	-9.5		-3
	SFP-30K-GSF	-2	1	3
Extinction Ratio (dB)	SFP-500-GMF	9		
	SFP-2K-GMF			
	SFP-10K-GSF			
	SFP-30K-GSF			
Center Wavelength (nm)	SFP-500-GMF	830	850	860
	SFP-2K-GMF	1270		1355
	SFP-10K-GSF	1285	1310	1343
	SFP-30K-GSF	1270		1355
Spectral width - RMS (nm)	SFP-500-GMF			0.85
	SFP-2K-GMF			4
	SFP-10K-GSF			2.8
	SFP-30K-GSF			1
Rise / Fall Time - 20% - 80% (ps)	SFP-500-GMF			260
	SFP-2K-GMF			
	SFP-10K-GSF			
	SFP-30K-GSF			

Receiver Optical characteristics				
Parameter (unit)		Minimum	Maximum	
Sensitivity (dBm)	SFP-500-GMF		-17	
	SFP-2K-GMF		-19	
	SFP-10K-GSF		-20	
	SFP-30K-GSF		-23	
Operating Wavelength (nm)	SFP-500-GMF	770	860	
	SFP-2K-GMF	1260	1610	
	SFP-10K-GSF	1270	1355	
	SFP-30K-GSF		1580	
Return Loss (dB)	SFP-500-GMF	12		
	SFP-2K-GMF			
	SFP-10K-GSF			
	SFP-30K-GSF			
Loss of Signal - Deasserted (dBm)	SFP-500-GMF		-17.5	
	SFP-2K-GMF		-19	
	SFP-10K-GSF		-20	
	SFP-30K-GSF		-23	
Loss of Signal - Asserted (dBm)	SFP-500-GMF	-35		
	SFP-2K-GMF			
	SFP-10K-GSF			
	SFP-30K-GSF			
Loss of Signal - Hysteresis (dB)	SFP-500-GMF	0.5		
	SFP-2K-GMF			
	SFP-10K-GSF			
	SFP-30K-GSF			

General Specifications	
Connector Type	Type LC connector with bail latch
Operating Temperature range	-40 to +85 °C (-40 to +185 °F)
Storage temperature range	-40 to +85 °C (-40 to +185 °F)
Humidity (non-condensing)	5 to 95% RH
Link Speed	Gigabit Ethernet
Laser Type	SFP-500-GMF VCSEL laser diode (Class 1 laser safety standard IEC 60825 compliant)
	SFP-2K-GMF FP laser diode (Class 1 laser safety standard IEC 60825 compliant)
	SFP-10K-GSF FP laser diode (Class 1 laser safety standard IEC 60825 compliant)
	SFP-30K-GSF DFB laser diode (Class 1 laser safety standard IEC 60825 compliant)
Media	SFP-500-GMF Multi-mode Fiber
	SFP-2K-GMF Multi-mode Fiber
	SFP-10K-GSF Single-mode Fiber
	SFP-30K-GSF Single-mode Fiber
Fiber	SFP-500-GMF 50 / 125 μm and 62.5 / 125 μm
	SFP-2K-GMF 50 / 125 μm and 62.5 / 125 μm
	SFP-10K-GSF 9 / 125 μm
	SFP-30K-GSF 9 / 125 μm
Code	SFP-500-GMF SX
	SFP-2K-GMF SX2
	SFP-10K-GSF LX
	SFP-30K-GSF lhx
Distance	SFP-500-GMF 550m
	SFP-2K-GMF 2km
	SFP-10K-GSF 10 km
	SFP-30K-GSF 40 km
Compliances	SFP-500-GMF 1.0625Gbps Fiber Channel FC-PI 100-M5-SN-I compliant 1.0625Gbps Fiber Channel FC-PI 100-M6-SN-I compliant 1.25Gbps IEEE 802.3z 1000BASE-SX compliant 1.25Gbps IEEE 802.3ah 1000BASE-SX compliant
	SFP-2K-GMF IEEE 802.3 1000BASE-SX+ compliant
	SFP-10K-GSF 1.0625Gbps Fiber Channel FC-PI 100-SM-LC-L compliant 1.25Gbps IEEE 802.3 1000BASE-LX compliant
	SFP-30K-GSF 1.25Gbps Gigabit Ethernet compliant
Inputs / Outputs	AC-coupled differential inputs and outputs

Dimensions

Inches [mm]



Safety Standards:



Electrical Safety



European Directives



WEEE Compliant



RoHS Compliant



US Emissions

Stride Managed Industrial Ethernet Switches

Industrial Hardened Full Feature Layer 2 Switch



For detailed specifications on all models, see following pages

		SE Series	SE2 Series
Price			
		starting at \$384 (5 port)	starting at \$460 (8 port)
Full Feature Layer 2 Switch			
		✓	✓
Industrial Temperature Ranges			
	Wide Temp	-40 to +75°C	-40 to +75°C
Ethernet Connectivity			
	RJ45 Ports	up to 1000 Mbps	up to 1000 Mbps
	Fiber Optic Ports	✓	✓
	SFP Ports	✓	✓
Port Count			
		5,8,10,16	8,16,18
Industrial Protocol Management			
	Modbus TCP	Read	Full Management
	EtherNet/IP	—	Full Management
Network Redundancy			
	STP/RSTP	✓	✓
	Proprietary Fast Recovery	Real-Time Ring	AD-Ring/AD-RP
Mounting			
	DIN Rail Mount	✓	✓
	Panel Mount	Integrated	Optional accessory
Input Power			
	Redundant Power Inputs	✓	✓
	Reverse Polarity Protection	✓	✓
	Power LED	✓	✓
	Power Alarm	✓	✓
Agency Approvals			
	UL508 / 61010	✓	✓
	Haz Loc-Class 1 Div 2	✓	✓
	ATEX Zone 2	✓	—
	CE	✓	✓
Warranty			
		5 years	5 years