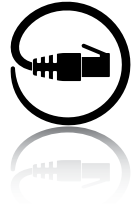# Stride® SE3 Series Unmanaged Industrial Ethernet Switches and Media Converters

SE3 Series Non-PoE DIN Rail Mounted

Features
- Wide temp range option
- DIN rail and panel mounting
- 12, 24 or 48 VDC redundant input
- GbE models
- Haz Loc models
- IP30 metal cases
- 5-year warranty

RoHS
☑
RoHS Compliant

Stride SE3 Non-PoE DIN Rail Mounted Unmanaged Models							
Part Number	Price	RJ45 10/100	RJ45 GbE	Fiber	Input power (max.)	Operating Temp	Agency Approvals
SE3-SW5U	$72.00	5			1.2 W	-10 to +65°C [14 to 149°F]	See General Specifications Table for each model's approvals
SE3-SW5U-T	$105.00		–		1.2 W	-40 to +75°C [-40 to 167°F]	
SE3-SW8U	$121.00	8		–	2.2 W	-10 to +65°C [14 to 149°F]	
SE3-SW8U-T	$136.00				2.2 W		
SE3-SW5UG-T	$170.00	–	5		6.6 W		
SE3-SW8UG-T	$229.00		8		9.2 W		
SE3-SW5U-1C1-T	$167.00	4		1 SC	5W	-40 to +75°C [-40 to 167°F]	
SE3-SW5U-1T1-T	$167.00			1 ST	5W		
SE3-SW6U-2C1-T	$219.00		–	2 SC	6W		
SE3-SW6U-2T1-T	$219.00			2 ST	6W		
SE3-SW7U-2P-T	$219.00	5		2 SFP*	8W		
SE3-SW5UG-1P-T	$199.00		4	1 SFP*	5.6 W		
SE3-SW10UG-2P-T	$329.00	–	8	2 SFP*	12W		
SE3-SW16UG-4P-T	$499.00		12	4 SFP*	15.4 W		
SE3-MC2U-C1-T	$141.00	1	–	1 SC	1.92 W	-40 to +80°C [-40 to 176°F]	
SE3-MC2U-T1-T	$141.00			1 ST			
SE3-MC2UG-1P-T	$179.00	–	1	1 SFP*	1.8 W		

* Optional SFP modules sold separately.

Stride® SE3 Series Unmanaged Industrial Ethernet Switches and Media Converters
SE3 Series Non-PoE DIN Rail Mounted

General Specifications		SE3-SW5U	SE3-SW5U-T	SE3-SW8U	SE3-SW8U-T	SE3-SW5UG-T	SE3-SW8UG-T	SE3-SW5U-1C1-T	SE3-SW5U-1T1-T	SE3-SW6U-2C1-T	SE3-SW6U-2T1-T	SE3-SW7U-2P-T	SE3-SW5UG-1P-T	SE3-SW10UG-2P-T	SE3-SW16UG-4P-T	SE3-MC2U-C1-T	SE3-MC2U-T1-T	SE3-MC2UG-1P-T
Processing Type		Store and forward																
Devices Supported		All IEEE 802.3 compliant devices are supported																
MAC Addresses	1K	●	●	●	●													
	2K							●	●	●	●					NA		
	8K					●	●					●	●	●	●			●
Memory Buffer	128Kbits															●	●	
	448Kbits	●	●	●	●			●	●	●	●							
	1Mbit						●						●					●
	4Mbits					●						●		●	●			
Packet Forwarding Rate		14.88 Kpps for Ethernet ports / 148.8 Kpps for Fast Ethernet ports / 14,888 Kpps for Gigabit Ethernet ports																
Jumbo Frame Support	9.6 Kbytes						●					●		●	●			
	10Kbytes					●							●					●
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 Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A																
EMS		CE EN55035/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)																
RoHS		RoHS (Pb-free) compliant																
Packaging and Protection		Metal case, IP30																
Hazardous Locations (Class I, Div. 2)	ANSI/ISA 12.12.01					●	●	●	●	●	●	●	●	●	●			
Agency Approvals	FCC, CE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	UL 61010-1, 61010-2-201	●	●	●	●	●	●					●	●	●	●	●	●	●
	UL 508							●	●	●	●							

Stride® SE3 Series Unmanaged Industrial Ethernet Switches and Media Converters

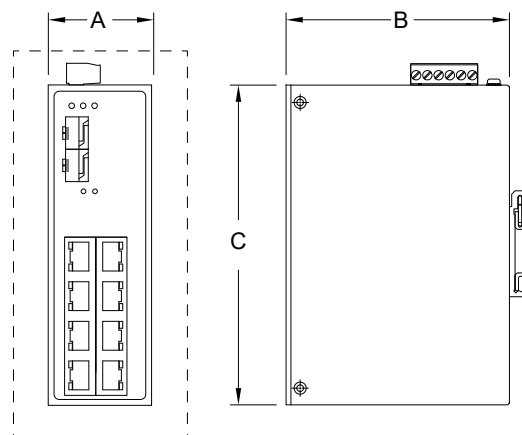## SE3 Series Non-PoE DIN Rail Mounted

Power Details

Power Input	Redundant input terminals, removable terminal block
Input Voltage	Class 2 power supply: 12-48 VDC
Reverse Power Protection	Yes
Power Consumption	Refer to Models table
Relay Contact	24VDC, 1A resistive, open on fault (not present on SE3-SW5U, SE3-SW5U-T, SE3-MC2UG-1P-T)

RJ45 Ports

Ethernet Compliance	IEEE 802.3i, 802.3u, 802.3x for 10/100 Ethernet IEEE 802.3ab for Gigabit Ethernet, IEEE 802.3z for Gigabit Fiber
Auto-Crossover	Yes, allows use of straight-through or crossover cables
Auto-Sensing Operation	Yes, full and half duplex
Auto-Negotiating Speed	Yes
Flow Control	IEEE 802.3x flow control, back pressure flow control
Cable Requirements	10BaseT: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm 100BaseTX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm 1000BaseTX: UTP/STP Cat.5e/6a cable EIA/TIA-568 100-ohm
Max. Cable Distance	100m [328ft]

SC/ST Fiber Port (100BaseFX multimode)

Optimal Fiber Cable	50/125 or 62.5/125 µm
Center Wavelength	1310 nm
Multimode	Transmitter power into 50/125 cable (dBm): -20 min, -14 max Transmitter power into 62.5/125 cable (dBm): -23.5 min, -14 max Receiver sensitivity (dBm): -32
Nominal Max. Distance	2km [1.24 mi]
Eye Safety (laser)	IEC 60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11

SFP Ports

Ethernet Compliance	IEEE 802.3, 802.3u, 802.3x for 10/100 Ethernet IEEE 802.3ab, 802.3z for Gigabit Ethernet
SFP (pluggable) ports accept 100/1000 Mbps Mini-GBIC (SFP) transceivers. See SFP module datasheet for optional fiber transceiver specifications	

Dimensions

Part Number	Weight kg [lb]	Width (A)	Depth (B)	Height (C)	Drawing
		mm [inches]			
SE3-SW5U	0.30 [0.66]	26 [1.0]	75 [3.0]	95 [3.7]	PDF
SE3-SW5U-T					PDF
SE3-SW8U	0.34 [0.74]	40 [1.6]	70 [2.8]	95 [3.7]	PDF
SE3-SW8U-T					PDF
SE3-SW5UG-T	0.45 [0.99]	30 [1.2]	95 [3.7]	140 [5.5]	PDF
SE3-SW8UG-T	0.52 [1.14]				PDF
SE3-SW5U-1C1-T	0.50 [1.10]	30 [1.2]	99 [3.9]	142 [5.6]	PDF
SE3-SW5U-1T1-T					PDF
SE3-SW6U-2C1-T					PDF
SE3-SW6U-2T1-T					PDF
SE3-SW7U-2P-T	0.57 [1.24]				PDF
SE3-SW5UG-1P-T	0.59 [1.30]				PDF
SE3-SW10UG-2P-T	0.71 [1.56]	46 [1.8]			PDF
SE3-SW16UG-4P-T	1.16 [2.57]	67 [2.6]			PDF
SE3-MC2U-C1-T	0.25 [0.55]	26 [1.0]	75 [3.0]	95 [3.7]	PDF
SE3-MC2U-T1-T					PDF
SE3-MC2UG-1P-T					PDF

Stride® SE3 Series Unmanaged Industrial Ethernet Switches and Media Converters

SE3 Series Non-PoE DIN Rail Mounted

SE3-SW5UG-1P-T DIP Switch Settings			
DIP Switch	*Description*	*ON*	*OFF*
1	Energy Efficient Ethernet	Enable	Disable
2	SFP Speed	100Mbps	1Gbps

SE3-MC2UG-1P-T DIP Switch Settings			
DIP Switch	*Description*	*ON*	*OFF*
1	Link Fault Pass (LFP)*	Enable	Disable
2	SFP Speed	100Mbps	1Gbps

* See explanation below.

SE3-MC2U-C1-T & SE3-MC2U-T1-T DIP Switch Settings			
DIP Switch	*Description*		*ON*	*OFF*
1	Link Fault Pass (LFP)*		Enable	Disable
2	Operating Mode		Converter	Switch**
3	Fiber Port Settings	Duplex Mode	Half-Duplex	Full-Duplex
4	Copper Port Settings	Auto-negotiation	Disable	Enable
5		Speed	10Mbps	100Mbps
6		Duplex Mode	Half-Duplex	Full-Duplex

* See explanation below.
** Switch mode is used to buffer incoming packets from the fiber port when the copper port is operating at 10Mbps.

Front Panel LEDs		
LED	*State*	*Description*
PWR/PWR1/ PWR2	On	Power connected and operational
	Off	No voltage
FAULT	On	Power input 1 or 2 is inactive
	Off	Power input 1 and 2 are both functional
RJ45/SC/ ST/SFP Port LINK/ACT**	On	Indicates that there is a proper Ethernet connection (link) between the port and another Ethernet device but that no communications activity is detected
	Blinking	Indicates that there is a proper Ethernet connection (link) between the port and another Ethernet device and that there is communications activity
	Off	Indicates that there is not a proper Ethernet connection (link) between the port and another Ethernet device

* See user manual (SE3-USER-M) for details of LED operation for each model.
** Upper LED indicates connection at highest available speed on RJ45 ports.

Link Fault Pass (LFP)

Link Fault Pass (LFP) technology allows for detection of a loss of connection as if there was no conversion from copper to fiber.

If the media converter detects a loss of connection on the copper port, it will in response automatically shut down the fiber port. This allows the receiving end of the fiber signal to detect the loss of ability to communicate to the end device at the copper side.

Stride SE3 Series Unmanaged Industrial Power Over Ethernet Switches

SE3 Series PoE+ DIN Rail Mounted

Features

- Wide temp range
- DIN rail and panel mounting
- Redundant power inputs from 9 to 55VDC
- GbE models
- 30W per port PoE+, 90W per port PoE++
- Haz Loc models
- IP30 and IP40 metal cases
- 5-year warranty

RoHS
RoHS Compliant

Stride SE3 PoE+ DIN Rail Mounted Unmanaged Models									
Part Number	**Price**	**RJ45 10/100 PoE+**	**RJ45 GbE PoE+**	**RJ45 10/100 Non-PoE**	**RJ45 GbE Non-PoE**	**Fiber**	**System Power Requirements (max.)**	**Operating Temp**	**Agency Approvals**
SE3-SWP1A5U-T	$249.00	4	–	1	–	–	4W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 508
SE3-SWP2A5U-T	$259.00	4	–	1	–	–	5.5 W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 508
SE3-SWP2A5UG-T	$349.00	–	4	–	1	–	6.3 W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 61010-1, 61010-2-201
SE3-SWP2A7U-2P-T	$299.00	4	–	1	–	2 SFP*	9W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 61010-1, 61010-2-201
SE3-SWP2B5UG-1P-T	$579.00	–	4	–	–	1 SFP*	6.3 W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 61010-1, 61010-2-201

* Optional SFP modules sold separately.

Power Details

Power Input	Redundant input terminals, removable terminal block	
Input Voltage (Class 2 Power Supply)	SE3-SWP1A5U-T	48–55 VDC
	SE3-SWP2A5U-T, SE3-SWP2A5UG-T	12–36 VDC
	SE3-SWP2A7U-2P-T	12–55 VDC
	SE3-SWP2B5UG-1P-T	9–55 VDC
Reverse Power Protection	Yes	
Relay Contact	24VDC, 1A resistive, open on fault	

Dimensions

Part Number	Weight kg [lb]	Width (A)	Depth (B)	Height (C)	Drawing
		mm [inches]			
SE3-SWP1A5U-T	0.50 [1.10]	30 [1.2]	99 [3.9]	142 [5.6]	PDF
SE3-SWP2A5U-T	0.76 [1.68]	46 [1.8]	99 [3.9]	142 [5.6]	PDF
SE3-SWP2A5UG-T	0.70 [1.54]	46 [1.8]	99 [3.9]	142 [5.6]	PDF
SE3-SWP2A7U-2P-T	0.82 [1.81]	46 [1.8]	99 [3.9]	142 [5.6]	PDF
SE3-SWP2B5UG-1P-T	0.912 [2.01]	65 [2.6]	90 [3.5]	110 [4.3]	PDF

PoE Details

Max PoE Power Output	SE3-SWP2B5UG-1P-T: 90W per PoE port (bt PoE-PSE)	
	All other models: 30W per PoE port	
Max PoE Power Budget	SE3-SWP1A5U-T	120W
	SE3-SWP2A5U-T	90–120W/12–36VDC
	SE3-SWP2A5UG-T	120W
	SE3-SWP2A7U-2P-T	60W/12VDC, 120W/36–55VDC
	SE3-SWP2B5UG-1P-T	60W/9VDC, 90W/12VDC, 150W/24VDC, 240W/48–55VDC with iPoE budget control
PoE Pinout	V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)	
	SE3-SWP2B5UG-1P-T: also V+, V+, V-, V-, for pin 4, 5, 7, 8	
PD (Powered Device) Detection	Yes - the switch port will detect the presence of a PoE enabled device before sending power. If a non-PoE device is detected, power will not be sourced on that port but Ethernet communications will be permitted.	
PoE Overload Protection	Yes	
Reverse Protection	Yes	
Redundancy Protection	Yes	

Stride® SE3 Series Unmanaged Industrial Power Over Ethernet Switches

SE3 Series PoE+ DIN Rail Mounted

General Specifications

	SE3-SWP1A5U-T	SE3-SWP2A5U-T	SE3-SWP2A5UG-T	SE3-SWP2A7U-2P-T	SE3-SWP2B5UG-1P-T
Processing Type	Store and forward				
Devices Supported	All IEEE 802.3 compliant devices are supported				
MAC Addresses	2K		8K		
Memory Buffer	448Kbits	1Mbit	4Mbits		1Mbit
Packet Forwarding Rate	14.88 Kpps for Ethernet ports 148.8 Kpps for Fast Ethernet ports 14,888 Kpps for Gigabit Ethernet ports				
Jumbo Frame Support	–	10Kbytes	9.6 Kbytes		10Kbytes
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 Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A				
EMS	CE EN55035/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)				
RoHS	RoHS (Pb-free) compliant				
Packaging	Metal case				
Protection	IP30				IP40
Hazardous Locations (Class I, Div.2)	ANSI/ISA 12.12.01				NA
Agency Approvals	FCC, CE				
	UL 508		UL 61010-1, 61010-2-201		

SE3-SWP2B5UG-1P-T Only SFP/PRRT DIP Switch Settings

DIP Switch	Description	ON	OFF
1	PD Remote Reset Technology (PRRT)*	Enable	Disable
2	SFP Speed	100Mbps	1Gbps

* Reboots PoE Ethernet switch when the fiber link drops for 3 seconds.
NOTE: Power the device off and on again to apply changes to these settings.

Front Panel LEDs

LED	State	Description
PWR1/PWR2	On	Power connected and operational
	Off	No voltage
FAULT	On	Power input 1 or 2 is inactive, or other fault condition
	Off	Power input 1 and 2 are both functional
RJ45*/ SFP Port LINK/ACT	On	Proper Ethernet connection (link) but no communications activity is detected
	Blinking	Proper Ethernet connection (link) and communications activity detected
	Off	No Ethernet connection (link) detected
PoE (Ports 1–4)	On	The port is supplying power to the powered device
	Off	No powered device attached or failure in PoE power
PoE Draw	**	SE3-SWP2B5UG-1P-T only. PoE consumption is ≤50%, 51-70%, 71-90% or 91-100%.

* Upper LED indicates connection at highest available speed on RJ45 ports.
** See user manual for details.

RJ45 Ports

Ethernet Compliance	IEEE 802.3i, 802.3u, 802.3x for 10/100 Ethernet IEEE 802.3ab for Gigabit Ethernet IEEE 802.3af or 802.3at for PoE IEEE 802.3bt for PoE on SE3-SWP2B5UG-1P-T
Auto-Crossover	Yes, allows use of straight-through or crossover cables
Auto-Sensing Operation	Yes, full and half duplex
Auto-Negotiating Speed	Yes
Flow Control	IEEE 802.3x flow control, back pressure flow control
Cable Requirements	10BaseT: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm 100BaseTX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm 1000BaseTX: UTP/STP Cat.5e/6a cable EIA/TIA-568 100-ohm
Max. Cable Distance	100m [328ft]

SFP Ports

Ethernet Compliance	IEEE 802.3, 802.3u, 802.3x for 10/100 Ethernet IEEE 802.3ab, 802.3z for Gigabit Ethernet
SFP (pluggable) ports accept 100/1000 Mbps Mini-GBIC (SFP) transceivers. See SFP module datasheet for optional transceiver specifications.	

SE3-SWP2B5UG-1P-T Only Safe PoE Disable DIP Switch Settings

DIP Switch	Description	ON	OFF
1	Port 2 PoE Function*	Enable	Disable
2	Port 3 PoE Function*	Enable	Disable
3	Port 4 PoE Function*	Enable	Disable
4	Port 5 PoE Function*	Enable	Disable

* Allows user to deactivate PoE power on a port before disconnecting the cable.

Stride® SE3 Series Unmanaged Industrial Power Over Ethernet Injectors

SE3 Series PoE+ DIN Rail Mounted

Features

- Inject power into Gigabit Ethernet link
- IEEE 802.3af/at/bt compliant PoE
- Wide temp range
- DIN rail and panel mounting
- 9–55 VDC redundant input
- Up to 100W per port PoE++
- IP30 metal cases
- 5-year warranty

RoHS
RoHS Compliant

Stride SE3 PoE+ DIN Rail Mounted Unmanaged Injector Models

Part Number	Price	RJ45 GbE PoE+	RJ45 GbE Non-PoE	Maximum PoE Power Budget	Operating Temp
SE3-IJ2A2UG-T	$279.00	1	1	100W	-40 to +75°C [-40 to 167°F]
SE3-IJ2B2UG-T	$259.00			90W	

General Specifications

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 Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A
EMS	CE EN55035/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)
RoHS	RoHS (Pb-free) compliant
Packaging	Metal case
Protection	IP30
Agency Approvals	FCC, CE
	UL 61010-1, 61010-2-201

Power Details

Power Input	Redundant input terminals, removable terminal block
Input Voltage (Class 2 Power Supply)	9–55 VDC
Maximum Current	8A (including PoE power budget)
Reverse Power Protection	Yes
System Power Consumption	1.6 W
Relay Contact	24VDC, 1A resistive, open on fault

PoE Details

Max PoE Power Budget	SE3-IJ2A2UG-T	Standard PoE Mode: 60W@9VDC, 90W@12–55VDC Enhanced PoE Mode: 60W@9VDC, 90W@12VDC, 100W@24–55VDC
	SE3-IJ2B2UG-T	Standard PoE Mode: 60W@9VDC, 90W@12–55VDC
PoE Pinout		V-, V-, V+, V+, for pin 1, 2, 3, 6 Also V+, V+, V-, V-, for pin 4, 5, 7, 8
PD (Powered Device) Detection		Yes - the switch port will detect the presence of a PoE enabled device before sending power. If a non-PoE device is detected, power will not be sourced on that port but Ethernet communications will be permitted.
PoE Overload Protection		Yes
Reverse Protection		Yes
Redundancy Protection		Yes

Stride® SE3 Series Unmanaged Industrial Power Over Ethernet Injectors
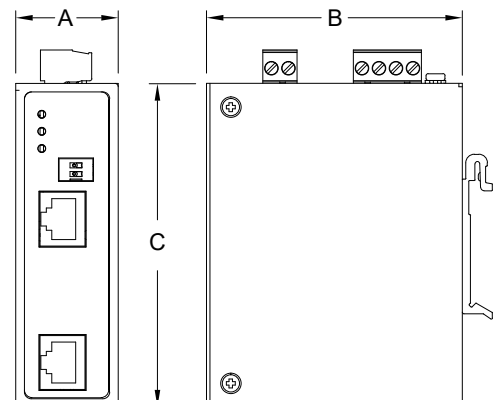## SE3 Series PoE+ DIN Rail Mounted

Front Panel LEDs			
LED	**Color**	**State**	**Description**
PWR	Green	On	Power inputs 1 and 2 are active
	Red	On	Power input 1 or 2 is inactive, alarm relay triggered
	-	Off	No voltage on either power input
PoE	Amber	On	The PoE output port is supplying power to the powered device over 2 pairs
	Green	On	The PoE output port is supplying power to the powered device over 4 pairs
	Amber	Blinking	The PoE output port is supplying power over 2 pairs after the Dual PD Check event happens (only occurs when Dual PD Check function is disabled
	Green	Blinking	The PoE output port once supplied power over 2 pairs and now has recovered to supply power over 4 pairs
	-	Off	No powered device attached or failure in PoE power
P/L*	-	Off	Actual PoE power consumption is ≤ 30W
	Blue	On	30W < Actual PoE power consumption ≤ 60W
	Red	On	60W < Actual PoE power consumption ≤ 90W
	Red	Blinking	90W < Actual PoE power consumption ≤ 100W (This event only occurs when Enhanced mode is enabled)

* SE3-IJ2A2UG-T only

RJ45 Ports	
Ethernet Compliance	IEEE 802.3af/at/bt for PoE
Auto-Crossover	Yes, allows use of straight-through or crossover cables
Auto-Sensing Operation	Yes, full and half duplex
Auto-Negotiating Speed	Yes
Cable Requirements	10BaseT: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm 100BaseTX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm 1000BaseTX: UTP/STP Cat.5e/6a cable EIA/TIA-568 100-ohm
Max. Cable Distance	100m [328ft] (total cable length from device A through the injector to device B)

SE3-IJ2A2UG-T DIP Switch Settings			
DIP Switch	**Description**	**ON**	**OFF**
1	PoE Mode	Enhanced Mode 50W max PoE budget over 2 pairs 100W max PoE budget over 4 pairs	Standard Mode PoE output follows IEEE 802.3at/bt
2	Dual PD Check	Enabled Valid detection required on both channels for PoE classification and power	Disabled Valid detection required for operation of each channel independently

Dimensions					
Part Number	**Weight kg [lb]**	**Width (A)**	**Depth (B)**	**Height (C)**	**Drawing**
		mm [inches]			
SE3-IJ2A2UG-T	0.37 [0.82]	30 [1.2]	75 [3.0]	95 [3.7]	PDF
SE3-IJ2B2UG-T	0.36 [0.79]				PDF

Stride® SE3 Series Unmanaged Industrial Ethernet Switches
SE3 Series IP67 Rated

Features
- Rugged IP67 rating
- Tight M12 connections
- Wide temp range
- Panel and DIN rail mount
- 12, 24 or 48 VDC redundant input
- 5-year warranty

RoHS Compliant

Stride SE3 Series IP67 Rated Models					
Part Number	Price	M12, IP67 10/100Tx Ethernet Ports	Input power (max.)	Operating Temp	Agency Approvals
SE3-SW5U-N67-T	$279.00	5	1.2 W	-40 to +75°C [-40 to 167°F]	FCC, CE, UL 61010-1, 61010-2-201

Stride® SE3 Series Unmanaged Industrial Ethernet Switches

SE3 Series IP67 Rated

General Specifications

Processing Type	Store and forward
Devices Supported	All IEEE 802.3 compliant devices are supported
MAC Addresses	1K
Memory Buffer	448Kbits
Packet Forwarding Rate	14.88 Kpps for Ethernet ports 148.8 Kpps for Fast Ethernet ports
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 Part 15 Subpart B Class A, CE EN55032/EN61000-6-4 Class A
EMS	CE EN55035/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)
RoHS	RoHS (Pb-free) compliant
Packaging and Protection	Plastic case, IP67
Agency Approvals	FCC, CE, UL 61010-1, 61010-2-201

Power Details

Power Connection	Dual DC power inputs through M12 5-pin A-coded male connector
Input Voltage	Class 2 power supply: 12–48 VDC redundant power inputs
Reverse Power Protection	Yes
System Power Consumption	0.5 W
Relay Contact	No

M12 Ethernet Ports

|	
10/100BaseT Ports	M12, female, D-coded, 4-pin
Ethernet Compliance	IEEE 802.3i, 802.3u, 802.3x for 10/100 Ethernet
Auto-Crossover	Yes, allows use of straight-through or crossover cables
Auto-Sensing Operation	Yes, full and half duplex
Auto-Negotiating Speed	Yes
Flow Control	IEEE 802.3x flow control, back pressure flow control
Cable Requirements	Twisted pair (Cat5e or better, shielded recommended)
Max. Cable Distance	100m [328ft]

Note: M12 caps need to be used on open (disconnected) ports.
Replacement caps (Part # ZP-JBH-CAP) are available from AutomationDirect.com.

Front Panel LEDs

LED	State	Description
PWR	On	Power input 1 or 2 is connected and operational
	Off	Power input 1 and 2 are both inactive
Ethernet Port LINK/ ACT	On	Indicates that there is a proper Ethernet connection (link) between the port and another Ethernet device but that no communications activity is detected
	Blinking	Indicates that there is a proper Ethernet connection (link) between the port and another Ethernet device and that there is communications activity
	Off	Indicates that there is not a proper Ethernet connection (link) between the port and another Ethernet device

Dimensions

mm [Inches]

12.8 [0.50]

47.8 [1.88]

37.2 [1.46]

12.3 [0.48]

191.2 [7.53]

12.3 [0.48]

158.9 [6.26]

35.0 [1.38]

8.8 [0.35]
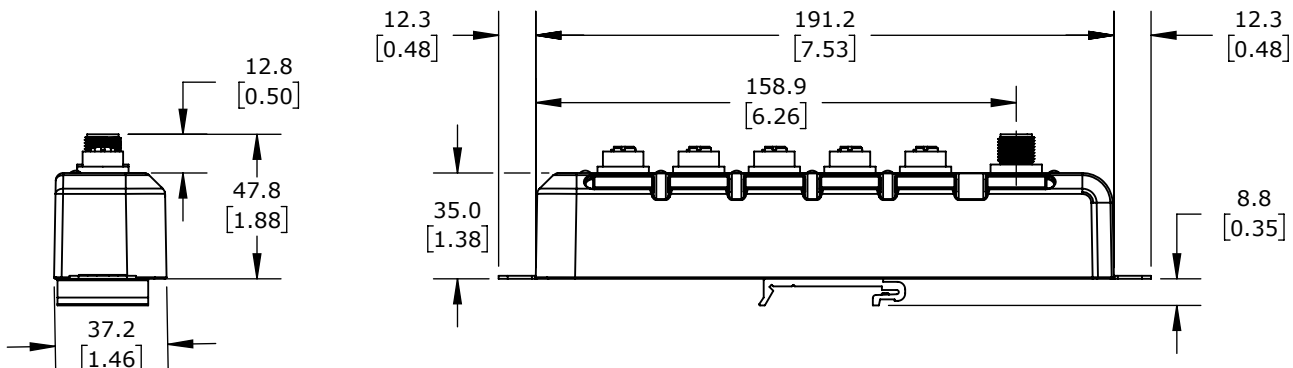
See our website: www.AutomationDirect.com for complete engineering drawings.

Stride® Unmanaged Industrial Ethernet Switches

Features

- Reliable connectivity
- Industrially hardened
- Simple installation
- For detailed specifications on all models, see the specific series pages

	SE Series	SE3 Series DIN Rail	SE3 Series IP67
Price			
	starting at $162.00	starting at $72.00	starting at $279.00
Broadcast Storm Protection			
	—	—	—
Industrial Temperature Ranges			
Standard Temp	-10 to +60°C [14 to 140°F]	-10 to +65°C [14 to 149°F]	—
Wide Temp	-40 to +85°C [-40 to +185°F]	-40 to +75°C [-40 to +167°F]	-40 to +75°C [-40 to +167°F]
Port Connectivity			
Port Count	2 to 9	5 to 16	5
RJ45 Port Speed	up to 100 Mbps	up to 1000 Mbps	—
M12 Port Speed	—	—	up to 100 Mbps
Fiber Optic Ports	✓	✓	—
PoE+ Ports	—	✓	—
SFP Ports	—	✓	—
Mounting			
DIN Rail Mount	✓	✓	✓
Panel Mount	✓	✓	✓
Input Power			
Redundant Power Inputs	✓	✓	✓
Reverse Polarity Protection	✓	✓	✓
Power LED	✓	✓	✓
Agency Approvals			
UL508 or UL61010	✓	✓	✓
Haz Loc–Class 1 Div 2	✓	✓ (certain models)	—
IECEx	✓	—	—
ATEX Zone 2	✓	—	—
CE	✓	✓	✓
EN50155 & EN50121	—	—	—
Warranty			
	5 years	5 years	5 years
Activity, Link & Speed LEDs			
	✓	✓	✓

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	$49.00
SFP-30K-FSF	Single-mode	1310 nm, FP	30 km	$44.00

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			

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

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		

Dimensions

Inches [mm]

0.53 [13.5]
0.09 [2.3]
0.33 [8.5]
0.49 [12.3]
2.18 [55.4]

Safety Standards:

c UL us — Electrical Safety
CE — European Directives
WEEE Compliant
RoHS — RoHS Compliant
FC — US Emissions
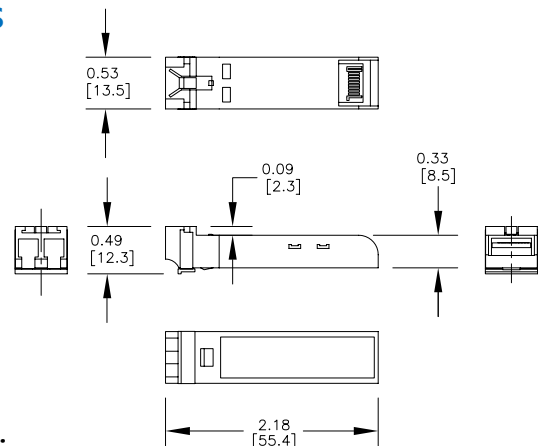
Stride® Industrial Ethernet Fiber Transceivers Gigabit Ethernet

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	$39.00
SFP-2K-GMF	Multi-mode	1310 nm, FP	2km	$69.00
SFP-10K-GSF	Single-mode	1310 nm, FP	10 km	$39.00
SFP-30K-GSF	Single-mode	1310 nm, DFB	30 km	$99.00

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			
	SFP-2K-GMF	9		
	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			
	SFP-2K-GMF			260
	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		
	SFP-2K-GMF	12	
	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		
	SFP-2K-GMF	-35	
	SFP-10K-GSF		
	SFP-30K-GSF		
Loss of Signal - Hysteresis (dB)	SFP-500-GMF		
	SFP-2K-GMF	0.5	
	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	
	SFP-30K-GSF	DFB laser diode (Class 1 laser safety standard IEC 60825 compliant)
Media	SFP-500-GMF	Multi-mode Fiber
	SFP-2K-GMF	
	SFP-10K-GSF	Single-mode Fiber
	SFP-30K-GSF	
Fiber	SFP-500-GMF	50 / 125 µm and 62.5 / 125 µm
	SFP-2K-GMF	
	SFP-10K-GSF	9 / 125 µm
	SFP-30K-GSF	
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]

0.53 [13.5]

0.09 [2.3]

0.33 [8.5]

0.49 [12.3]

2.18 [55.4]

Safety Standards:

c(UL)us **Electrical Safety**

CE **European Directives**

WEEE Compliant

RoHS **RoHS Compliant**

FC **US Emissions**
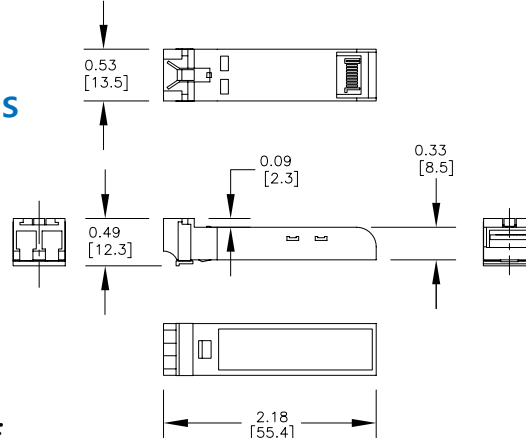
Stride® Industrial Ethernet Copper Transceivers Gigabit Ethernet

Description:

The STRIDE SFP-1GC-T is a hot-pluggable Small Form Factor Pluggable (SFP) transceiver. It has an RJ-45 connector, and can send and receive data at 1.25 Gbps up to 100m distance over 4-pair Cat5e/6a cable. The module is compliant with the SFP Multi-Source Agreement (MSA) and IEEE802.3:2002.
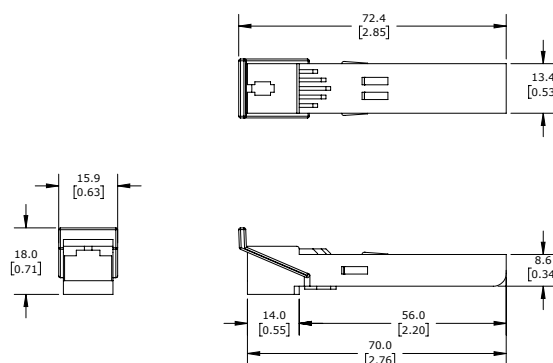
Part Number	Connector Type	Link Speed	Price
SFP-1GC-T	RJ-45	Gigabit Ethernet	$69.00

RJ45 Ports	
Ethernet Compliance	IEEE 802.3ab (1000Base-T) Gigabit Ethernet
Auto-Crossover	Yes, allows use of straight-through or crossover cables
Auto-Sensing Operation	Yes, full and half duplex
Port Speed	1000Base-T only
Cable Requirements	4-pair UTP/STP Cat.5e/6a cable EIA/TIA-568 100-ohm
Max. Cable Distance	100m [328ft]

General Specifications	
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
Compliances	SFP Multi-Source Agreement (MSA)

Dimensions

Inches [mm]

72.4 [2.85]
13.4 [0.53]
15.9 [0.63]
18.0 [0.71]
8.6 [0.34]
14.0 [0.55]
56.0 [2.20]
70.0 [2.76]

Safety Standards:

CE — European Directives

WEEE Compliant

RoHS — RoHS Compliant

FC — US Emissions