

## STRIDE® SE3 SERIES INDUSTRIAL UNMANAGED POWER OVER ETHERNET SWITCHES



NOTE: DOWNLOAD USER MANUAL SE3-USER-M FROM THE PRODUCT MANUALS AREA OF AUTOMATIONDIRECT.COM FOR ADDITIONAL DETAILS.

General Specifications	
Processing Type	Store and forward
Devices Supported	All IEEE 802.3 compliant devices are supported
MAC Addresses	2K SE3-SWP1A5U-T, SE3-SWP2A5U-T
	8K SE3-SWP2A5UG-T, SE3-SWP2A7U-2P-T, SE3-SWP2B5UG-1P-T
Memory Buffer	448Kbits SE3-SWP1A5U-T, SE3-SWP2A5U-T
	1Mbit SE3-SWP2A5UG-T, SE3-SWP2B5UG-1P-T
	4Mbits SE3-SWP2A7U-2P-T
Packet Forwarding Rate	14.88 Kpps for Ethernet ports 148.8 Kpps for Fast Ethernet ports 14,888 Kpps for Gigabit Ethernet ports
	9.6 Kbytes SE3-SWP2A7U-2P-T
Jumbo Frame Support	10Kbytes SE3-SWP2A5UG-T, SE3-SWP2B5UG-1P-T
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	SE3-SWP2B5UG-1P-T: Metal case, IP40   All other models: Metal case, IP30
Hazardous Locations	SE3-SWP2B5UG-1P-T: none   All other models: ANSI/ISA 12.12.01 (Class I, Div.2)
Agency Approvals	FCC, CE   All
	UL 61010-1, 61010-2-201   SE3-SWP2A5UG-T, SE3-SWP2A7U-2P-T, SE3-SWP2B5UG-1P-T
	UL 508   SE3-SWP1A5U-T, SE3-SWP2A5U-T

Stride SE3 Unmanaged PoE Models						
Part Number	RJ45 10/100 PoE+	RJ45 GbE PoE+	RJ45 10/100 GbE	Fiber	System Power (Max.)**	Operating Temperature
SE3-SWP1A5U-T	4	-	1	-	4W	-40 to +75°C [-40 to 167°F]
SE3-SWP2A5U-T	4	-	1	-	5.5 W	
SE3-SWP2A5UG-T	-	4	-	1	6.3 W	
SE3-SWP2A7U-2P-T	4	-	1	-	2 SFP* 9W	
SE3-SWP2B5UG-1P-T	-	4	-	-	1 SFP* 6.3 W	

\* Optional SFP modules sold separately.  
\*\* Does not include power supplied to PoE devices

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
System Power Consumption	Refer to Models table
Relay Contact	24VDC, 1A resistive, open on fault

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) Also V+, V+, V-, V-, for pin 4, 5, 7, 8 on SE3-SWP2B5UG-1P-T
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

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	Indicates that there is a proper Ethernet connection (link) between the port and another Ethernet device, but 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. Make sure that each end of the cable has been plugged in securely.
PoE (Ports 1-4)	On	The port is supplying power to the powered device (SE3-SWP2B5UG-1P-T: green = IEEE 802.3bt, amber = IEEE 802.3af/at)
	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 you to use straight-through or crossover wired 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 (100m) 100BaseTX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m) 1000BaseTX: UTP/STP Cat.5/E cable; EIA/TIA-568 100-ohm (100m)
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 DIP Switch Settings:

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

\* Allows user to remotely reboot the PoE Ethernet switch by dropping the fiber link for 3 seconds.  
NOTE: The device must be powered off and on again to apply changes to these settings.

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.

## Installation:

These devices are open-type and are meant to be installed in an enclosure which is only accessible with the use of a tool and suitable for the environment when installed in Class 1, Division 2 Hazardous Locations.

**WARNING:** The following information applies when operating approved models of this device in hazardous locations: Suitable for use in Class I, Division 2, Groups A, B, C and D Hazardous Locations, or nonhazardous locations only.

**WARNING: EXPLOSION HAZARD**

- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.
- Substitution of any component may impair suitability for Class I, Division 2.

## DIN Rail Mounting:

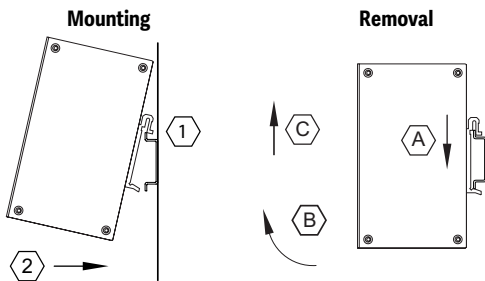
The switch can be mounted on a standard 35 x 7.5 mm height DIN rail (Standard: CENELEC EN50022) installed either vertically or horizontally.

DIN rail mounting steps:

- Hook top back of unit over the DIN rail.
- Push bottom back onto the DIN rail until it snaps into place.

DIN rail removal steps:

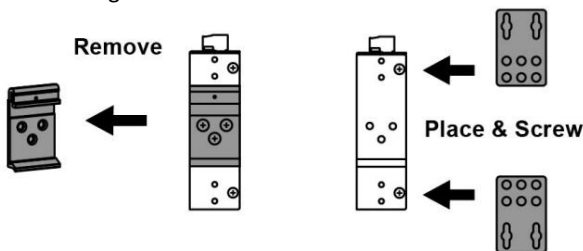
- Push the unit down to free the bottom of the DIN rail.
- Rotate the bottom of the unit away from the DIN rail.
- Unhook top of unit from DIN rail.



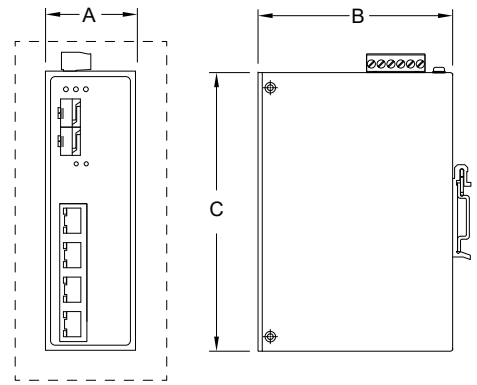
## Wall Mounting:

Follow the steps below to mount the switch using the wall mounting bracket. Bracket details and hole patterns differ between models.

- Remove the DIN rail bracket by loosening the screws.
- Attach the wall mounting brackets on the top and bottom of the switch.
- Locate screws in the wall based on the positions of the slotted screw holes on the mounting brackets and attach the switch to the wall.



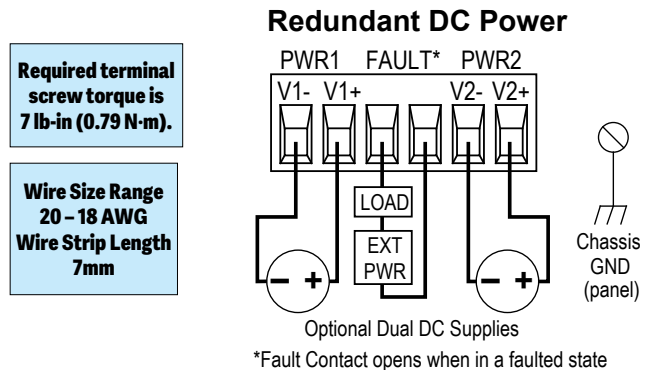
## Dimensions:



Dimensions				
Part Number	Weight kg [lb]	Width (A)	Depth (B)	Height (C)
		mm [inches]		
SE3-SWP1A5U-T	0.50 [1.10]	30 [1.2]	99 [3.9]	142 [5.6]
SE3-SWP2A5U-T	0.76 [1.68]	46 [1.8]	99 [3.9]	142 [5.6]
SE3-SWP2A5UG-T	0.70 [1.54]			
SE3-SWP2A7U-2P-T	0.82 [1.81]			
SE3-SWP2B5UG-1P-T	0.912 [2.01]	64.9 [2.6]	89.8 [3.5]	110 [4.3]

## Power Wiring:

The switch can be powered from the same DC source that is used to power your other devices. To maintain the UL listing, this source must be a Class 2 power supply. A DC voltage in the appropriate voltage range needs to be applied between the V1+ terminal and the V1- terminal as shown below. The chassis screw terminal should be tied to panel or chassis ground. To reduce down time resulting from power loss, the switch can be powered redundantly with a second power supply as shown below.



**NOTE: IF ONLY ONE POWER SUPPLY IS USED, JUMPER V1+ TO V2+ AND V1- TO V2- TO ELIMINATE POWER FAULT ALARM.**

## Communication Ports Wiring:

The switch provides connections to standard Ethernet devices such as PLCs, Ethernet I/O, industrial computers and much more. Use data-quality (not voice-quality) twisted pair cable rated Cat5e (or better) with standard RJ45 connectors. Straight-through or crossover RJ45 cable can be used for all devices which are connected to the switch, as all the ports are capable of auto-mdi/mdix-crossover detection.

The RJ45 Ethernet port connector bodies on the switch are metallic and connected to the Chassis GND terminal. Therefore, shielded cables may be used to provide further protection. Electrical isolation is also provided on the Ethernet ports for increased reliability.

## Additional Help and Support

- For additional product support, specifications, and installation, download User Manual SE3-USER-M from the Product Manuals area of [www.AutomationDirect.com](http://www.AutomationDirect.com).
- For additional technical support and questions, call our Technical Support team @ 770-844-4200.

