

# STRIDE® SE2 SERIES INDUSTRIAL UNMANAGED POWER OVER ETHERNET SWITCHES



**NOTE: FOR ADDITIONAL PRODUCT DETAILS, A USER MANUAL, SE2-USER-M, IS AVAILABLE AS A DOWNLOADABLE PDF FILE FROM THE ONLINE DOCUMENTATION AREA OF THE AUTOMATIONDIRECT WEBSITE.**

### Stride SE2 Unmanaged PoE Models

Part Number	RJ45 10/100	RJ45 GbE	RJ45 10/100 PoE+	RJ45 GbE PoE+	Operating Temp
SE2-SWP5U-T	1	-	4	-	-40 to +75°C (-40 to +167°F)
SE2-SWP5UG-T	-	1	-	4	

### Power Details

<b>Power Input</b>	Redundant Input Terminals Class 2 Power Supply;
<b>Input Voltage</b>	12 or 24VDC for Ethernet communications only, 48-58 VDC for PoE (15.4 W per port) 54-58 VDC for PoE+ (30W per port)
<b>Reverse Power Protection</b>	Yes
<b>Wire Size and Torque</b>	24-16 AWG, max wire length 3m (9.84 ft); Wire strip length 7mm; Torque: 1.77 lb-in (0.2 N-m)
<b>Power Consumption</b>	switch only = 3W
<b>Power Budget</b>	Ensure power supply to the switch is sized adequately to account for powered devices (PD). switch plus PDs = 123 W max
<b>Ground Connection</b>	< 5Ω 18 - 14 AWG

### RJ45 Ports

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

### PoE Details

<b>Max Power per Port</b>	30W at 48-58 VDC 720mA V+ pins 1, 2 V- pins 3, 6
<b>Power Input</b>	54-58 VDC for PoE+ 48-58 VDC for PoE
<b>PD (Powered Device) Detection</b>	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.
<b>PoE Overload Protection</b>	Yes
<b>Reverse Protection</b>	Yes
<b>Redundancy Protection</b>	Yes

### General Specifications

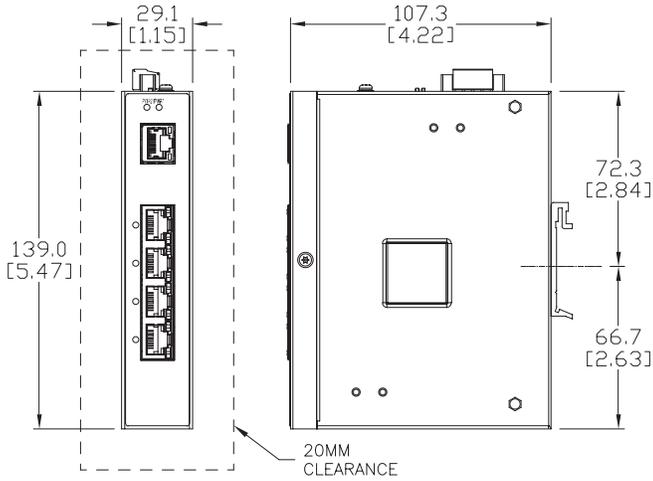
<b>Operating Mode</b>	Store and forward wire speed switching, non-blocking
<b>Devices Supported</b>	All IEEE 802.3 compliant devices are supported
<b>MAC Addresses</b>	2K
<b>Packet Buffer</b>	1Mbit
<b>Packet Forwarding Rate</b>	1.5 Mpps
<b>Broadcast Storm Protection*</b>	DIP switch enabled (DIP switch 1)
<b>Latency</b>	< 15 μs
<b>Jumbo Frame</b>	9K
<b>Storage Temperature Range</b>	-40 to +85 °C (-40 to +185 °F)
<b>Humidity (non-condensing)</b>	5 to 95% RH
<b>Environmental Air</b>	No corrosive gases permitted
<b>Vibration, Shock &amp; Freefall</b>	IEC60068-2-6, -27, -32
<b>EMI Emissions</b>	FCC CFR47 Part 15, EN55032/CISPR32, Class A
<b>EMS</b>	IEC61000-4-2 (ESD): +/- 6kV (contact), +/- 8kV (air) IEC61000-4-3 (RS): 10V/m (80MHz ~ 2GHz) IEC61000-4-4 (EFT): Power Port +/- 2kV; Data Port: +/- 1kV IEC61000-4-5 (Surge): Power Port: +/- 1kV/DM, +/- 2kV/CM; Data Port +/- 2kV IEC61000-4-6 (CS): 10V (150kHz ~ 80MHz)
<b>RoHS and WEEE</b>	RoHS (Pb free) and WEEE compliant
<b>Packaging and Protection</b>	Metal case, IP30
<b>Hazardous Locations</b>	ANSI/ISA 12.12.01-2015 & CSA 22.2 No. 213-15 (Class I, Div.2) (file #E200031); UL/cUL UL/cUL 61010-1, Class 1, Div. 2, Groups A, B, C, D, (UL file #E200031) CE
<b>Agency Approvals</b>	

\* Broadcast storm threshold value is 2 packets/100ms for 10 Mbps port or 2 packets/10ms for 100 Mbps and 1000 Mbps ports. DIP switch 11 is unused.

### Front Panel LEDs

LED	State	Description
<b>PWR1 LED</b>	On	Power 1 connected and operational
	Off	Power 1 no voltage
<b>PWR2 LED</b>	On	Power 2 connected and operational
	Off	Power 2 no voltage
<b>ACT/LNK LED</b>	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 the cable has been plugged securely into the ports at both ends.
<b>Speed LED 10/100 Models</b>	On	A 100 Mbps (100BaseT) connection is detected.
	Off	A 10 Mbps (10BaseT) connection is detected.
<b>Speed LED 10/100/1000 Models</b>	On	A 1000 Mbps (1000BaseT) connection is detected
	Off	A 100 or 10 Mbps (100BaseT or 10BaseT) connection is detected
<b>PoE</b>	On	Port is providing power
	Off	Port is not providing power

## Dimensions: mm [inches]



## Safety Standards:



RoHS Compliant

## Installation – DIN Rail Mounting:

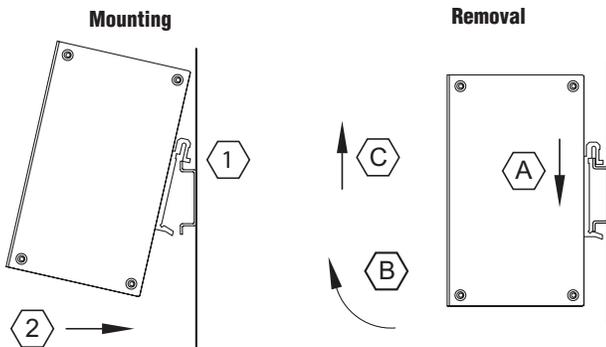
These devices are open-type and are meant to be installed in an enclosure which is only accessible with the use of a tool and suitable for the environment when installed in Class 1, Division 2 Hazardous Locations. The switch can be snapped onto a standard 35 mm x 7.5 mm height DIN rail (Standard: CENELEC EN50022) and can be mounted either vertically or horizontally. Allow 20mm (0.79”) clearance between an SE2 switch and other equipment on the DIN rail.

DIN rail mounting steps:

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

DIN rail removal steps:

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

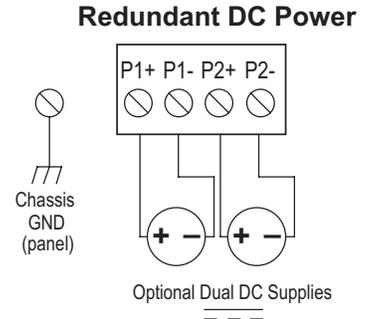


## Power Wiring:

The switch can be powered from the same DC source that is used to power your other devices. To maintain the UL61010-1 listing, this must be a Class 2 power supply. A DC voltage in the range of 12 to 48 VDC needs to be applied between the P1+ terminal and the P1- 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. A recommended DC power supply is AutomationDirect.com part number PSB48-120S

Required terminal screw torque is 1.77 lb-in (0.20 N-m).

Wire Size Range 24 – 16 AWG  
Wire Strip Length 7mm



## 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 the switch is connected to 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. To prevent ground loops, the cable shield should be tied to the metal connector body at one end of the cable only. Electrical isolation is also provided on the Ethernet ports for increased reliability.

**WARNING:** The following information applies when operating 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.

Cet appareillage est utilisable dans les emplacements de Classe I, Division 2, Groupes A, B, C et D, ou dans les emplacements non dangereux seulement.

**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.

**AVERTISSEMENT: RISQUE D'EXPLOSION**

- Avant de deconnecter l'equipement, couper le courant ou s'assurer que l'emplacement est designe non dangereux.
- La substitution de composants peut rendre ce materiel inacceptable pour les emplacements de Classe I, Division 2.

## Additional Help and Support

- For additional product support, specifications, and installation, a User Manual, SE2-USER-M, is available as a downloadable PDF file from the Online Documentation area of [www.AutomationDirect.com](http://www.AutomationDirect.com)
- For additional technical support and questions, call our Technical Support team @ 770-844-4200.

