AUTOMATIONDIRECT.com
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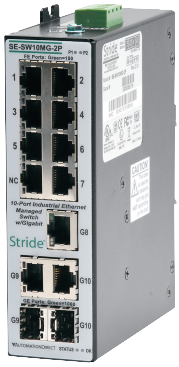
STRIDE™ MANAGED INDUSTRIAL ETHERNET 10-PORT GIGABIT SWITCH WITH TWO SFP PORTS – DATA SHEET



SE-SW10MG-2P

Description:

STRIDE SlimLine Industrial Gigabit Managed Ethernet Switch, Metal housing, -40 to +75 deg. C operating temperature range, seven 10/100 BaseT RJ45 Ethernet ports, three Gigabit 10/10/1000 BaseT RJ45 ports and two advanced combination SFP ports that accept noise-immune fiber optic links up to 40 km. Redundant power inputs with surge and spike protection, auto-crossover, DIN rail mounting. Supports Store and Forward wire speed switching and full-duplex with flow control. UL listed for Hazardous Locations (Class I, Div. 2, Groups A, B, C, D) and CE marked. SFP option modules sold seperately.

NOTE: DIMENSIONS, INSTALLATION AND WIRING INFORMATION IS SHOWN ON THE BACK OF THIS DATA SHEET.

Copper RJ45 Ports: (10/100BaseT)	
10/100 RJ45 ports	Seven RJ45 10/100 ports fully IEEE 802.3 compliant
10/100 RJ45 speed and duplex	Configurable or 10/100/1000 auto-detecting for speed and duplex (full or half)
RJ45 MDI / MDIX	Auto-mdi / mdix-crossover automatically supports either straight or crossed cables
RJ45 Polarity	Auto-polarity for automatic correction of crossed TXD and RXD pairs
Modes	Full or half duplex operation with flow control supported on all ports

Copper RJ45 Ports: Gigabit	
RJ45 ports	Three RJ45 10/100/1000 fully 802.3z compliant Note: Two ports are combination Gigabit ports that have both a RJ45 connector and SFP cage. For each of these ports only one connector can be used at a time.
RJ45 speed and duplex	Configurable or 10/100/1000 auto-detecting for speed and duplex (full or half)
RJ45 MDI / MDIX	Auto-mdi / mdix-crossover automatically supports either straight or crossed cables
RJ45 Polarity	Auto-polarity for automatic correction of crossed TXD and RXD pairs
Modes	Full or half duplex operation with flow control supported on all ports

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

Console ports: USB and RS232 (RJ45)	
Management interfaces	Text (Telnet and SSH), CLI (command line interface) and SNMP (see the user manual for supported MIBs)
Console ports are located on the bottom surface of the switch.	

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

General Specifications	
Ethernet switch type	10-Port Managed, All ports 10/100/1000
Operating mode	Store and forward wire speed switching, non-blocking. Broadcast and multicast storm protection
Devices supported	All IEEE 802.3 compliant devices are supported
Ethernet compliance	IEEE 802.3 (10Mbps Ethernet supports legacy devices) IEEE 802.3u (Fast Ethernet 100Mbps for newer devices) IEEE 802.3x (Full-Duplex with Flow Control) IEEE 802.1D/w (Rapid Spanning Tree for redundant rings and Spanning Tree for interoperability) IEEE 802.1p (Priority Queuing – QoS, CoS, ToS/DS) IEEE 802.1Q (VLAN for traffic segregation) IEEE 802.3ab/z
Ethernet protocols supported	SNMPv1 / v2 / v3, RMON, DHCP, SNTP, TFTP, STP, RSTP, QoS / CoS / ToS / DS, IGMPv1 / v2, VLAN (tag and port based), HTTP, HTTPS (SSL and TSL), Telnet, SSH and more
Industrial protocols supported	Modbus / TCP, EtherNet / IP, PROFInet, Foundation Fieldbus HSE and others
MAC addresses	8192 addresses
Memory bandwidth	32 Gbps
Latency (typical)	< 5 µs + frame time
Power input Redundant input terminals	5.0 W (with no fiber transceivers); 7.0 W (with two fiber transceivers)
Input voltage	10-30 VDC (continuous) - Class 2 Power Supply
Reverse power protection	Yes
"OK" output Indicates power and operational status	Voltage same as switch input voltage Maximum current output 0.5 Amp
Transient protection	15,000 watts peak
Spike protection	5,000 watts (10x for 10 µS)
Ethernet isolation	1500 VRMS 1 minute
Operating temperature range	-40 to 75°C (cold startup at -40°C), -40 to 167°F (cold startup at -40°F)
Storage temperature range	-40 to +85 °C (-40 to +185 °F)
Humidity (non-condensing)	5 to 95% RH
Environmental Air	For use in Pollution Degree 2 environment. No corrosive gases permitted
Vibration and shock	IEC60068-2-6, -27
EMI emissions	FCC part 15, ICES-003, EN61000-6-4
EMC immunity	EMC: FCC part 15, ICES-003; EN55022, EN61000-6-2, CE
RoHS and WEEE	RoHS and WEEE compliant
Packaging and protection	Corrosion-resistant aluminum case; IP40 protection from dust and debris
Agency Approvals	Electrical safety: ULHaz Loc (Class 1, Div. 2, Groups A, B, C, D), CSA C22.2/14; EN61010-1, CE Marine and offshore rated per ABS NEMA TS-2 for traffic control systems

Safety Standards:

Electrical Safety

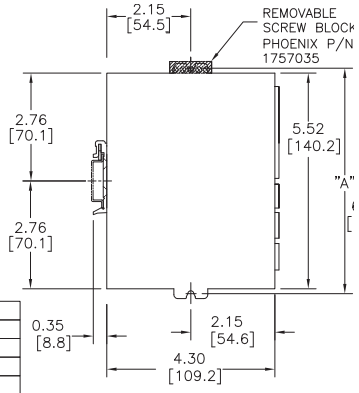
European Directives

US Emissions

WEEE Compliant

RoHS Compliant

Dimensions:



SCREW MOUNTING LOCATIONS	
SCREW SIZE	DIM "A"
#6	5.87 [149.1]
#8	5.92 [150.4]
#10	5.97 [151.6]
#12	6.02 [152.9]

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Installation – DIN Rail Mounting:

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.

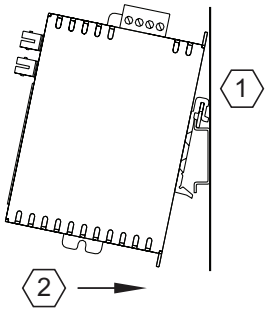
DIN rail mounting steps:

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

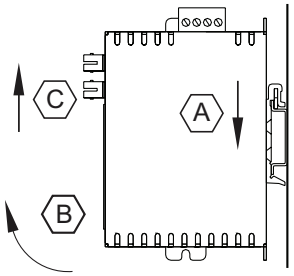
DIN rail removal steps:

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.

Mounting



Removal



WARNING

All power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods and in accordance with the authority having jurisdiction.
"This Equipment is Suitable for Use in Class I, Division 2, Groups A, B, C, D or Non-Hazardous Locations Only".

WARNING – EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

WARNING – EXPLOSION HAZARD – WHEN IN HAZARDOUS LOCATIONS, DISCONNECT POWER BEFORE REPLACING OR WIRING UNITS.

WARNING – EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.

WARNING – EXPLOSION HAZARD – IN HAZARDOUS OR POTENTIALLY HAZARDOUS LOCATIONS, DO NOT SEPARATE ANY PART OF THE UNIT WHEN ENERGIZED. USE THE UNIT FOR INTERNAL CONNECTIONS ONLY.

Tout pouvoir, le câblage d'entrée et de sortie (I/O) doivent être conformes aux méthodes de câblage de Classe I, Division 2 et conformément à l'autorité compétente.
"Cet équipement est adapté pour une utilisation en Classe1, Division 2, Groupes A, B, C et D ou endroits non-dangereux seulement ".

AVERTISSEMENT – RISQUE D'EXPLOSION – LA SUBSTITUTION DE TOUT COMPOSANT PEUT NUIRE À LA CONFORMITÉ DE CLASSE I, DIVISION 2.

AVERTISSEMENT – RISQUE D'EXPLOSION – LORSQUE DANS DES ENDROITS DANGEREUX, DÉBRANCHEZ LE CORDON D'ALIMENTATION AVANT DE REMPLACER OU DE BRANCHER LES MODULES.

AVERTISSEMENT – RISQUE D'AVERTISSEMENT – NE DÉBRANCHEZ PAS L'ÉQUIPEMENT PENDANT QUE LE CIRCUIT EST DIRECT OU À MOINS QUE L'ENVIRONNEMENT SOIT CONNU POUR ÊTRE LIBRE DE CONCENTRATIONS INFLAMMABLES.

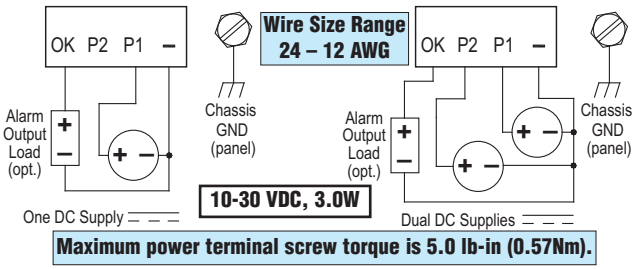
AVERTISSEMENT – RISQUE D'EXPLOSION – DANS LES ENDROITS DANGEREUX OU POTENTIELLEMENT DANGEREUX, NE PAS SEPARER UNE PARTIE DE L'UNITE SOUS TENSION. SEULEMENT UTILISEZ L'APPAREIL POUR LES CONNEXIONS INTERNES.

Power and Alarm Wiring:

A DC voltage in the range of 10 to 30 VDC needs to be applied between the P1 (plus) terminal and the Minus terminal as shown below. To maintain UL listing, this must be a Class 2 power supply. 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 PSL-24-030. When powering multiple switches from a common power supply, it is most reliable to power the switches sequentially rather than simultaneously. The characteristics of the power supply and the significant startup current of the switches may result in an error in booting the switches when powered simultaneously.

Single DC Power **Redundant DC Power**



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 category 5 (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.

***NOTE:** THE FOLLOWING **AUTOMATIONDIRECT** PLC ETHERNET MODULES ARE NOT COMPATIBLE WITH THE **STRIDE** ETHERNET SWITCHES AND MEDIA CONVERTER WITH FIBER OPTIC CONNECTIONS BECAUSE THE MODULES HAVE A SPEED OF 10BASEF (FIBER OPTIC) ONLY: ETHERNET COMMUNICATIONS MODULE, P/N H2-ECOM-F & H4-ECOM-F; ETHERNET BASE CONTROLLER MODULE, P/N H2-EBC-F & H4-EBC-F; ETHERNET REMOTE MASTER MODULE, P/N H2-ERM-F & H4-ERM-F.*

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.

Additional Help and Support

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