SmartE Series Hardened Lite Managed Ethernet Switch

Installation Guide

1 Unpacking

Unpack the items. Your package should include:

- > One SmartE hardened switch
- DIN rail brackets and screws

If items are missing or damaged, notify your EtherWAN representative. Keep the carton and packing material. The full product manual can be downloaded from:





2 What Else You Need

- Appropriate cables for data ports. To prevent damage to the switch from electrical surges, it is recommended to use STP (Shielded twisted pair) cabling.
- Personal computer or laptop
- > Appropriate SFP modules for SFP ports

3 Select a Location

- Installation: DIN-Rail mount, wall mount, flat panel mount. Wall and flat panel mounting kits are purchased separately.
- > Select a power source within 6 feet (1.8 meters).
- Choose a dry area with ambient temperature between -40 and 75°C (-40 and 167°F). Make sure the vents are not blocked or covered.
- > Humidity range (Operational): 10% to 95%, non-condensing.

4 Connect to the Data Ports

Depending on the model, your switch can have the following ports: **Fast Ethernet Models**

SF300-05	5-port 10/100BASE-T(X)
SF300-08	8-port 10/100BASE-T(X)
SF300-0602	6-port 10/100BASE-T(X) + 2-port 100BASE SFP
SF300-16	16-port 10/100BASE-T(X)
SF300-1402	14-port 10/100BASE-T(X) + 2-port 100BASE SFP

Gigabit Ethernet Models

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SG300-08	8-port 10/100/1000BASE-T(X)			
SG300-0602	6-port 10/100/1000BASE-T(X) + 2-port 100/1000BASE SFP			
SG300-16	16-port 10/100/1000BASE-T(X)			
SG300-120202c	12-port 10/100/1000BASE-T(X) + 2-port 100/1000BASE SFP Combo + 2-port 100/1000BASE SFP			

5 Apply Power

- > The switch is equipped with a terminal block with two pairs of power inputs.
- > Only one power input is required to operate the switch. However, redundant power supply functionality is supported.
- Input power is 12-57VCD, 0.15A~0.55A for SF300-05 / SF300-08 / SF300-0602 / SG300-08 / SG300-0602.
- Input power is 12~57VDC, 0.2A~0.95A for SF300-16 / SF300-1402 / SG300-16/SG300-120202c.
- The power input specification complies with the requirements of SELV (Safety Extra Low Voltage), and the power supply should comply with UL 61010-1 and UL 61010-2-201 with LPS or limited energy source.

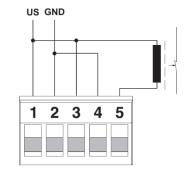
Terminal Block

The switch provides two power inputs on a 12-57VDC terminal block. The terminal block has 5 terminal posts.

Pin		Description	
Power 1	+	12-57VDC	
	-	Power Ground	
Power 2	+	12-57VDC	
	-	Power Ground	
Digital output		12-57VDC, typ. 100mA max. 0.7A (1 minute)	

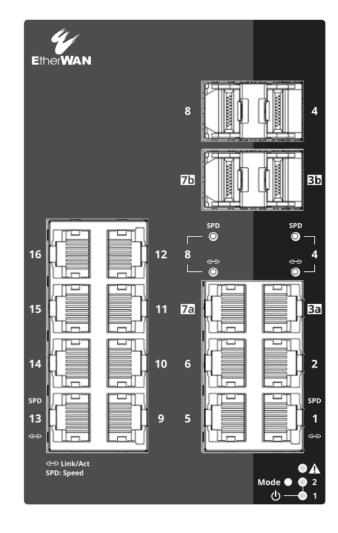
Digital Alarm Output

The digital alarm output is an open drain output. In normal mode, the output is connected to ground potential. If an error/alarm is present, the output is floating.



6 Front Panel LEDs

LED	Color	Status		
Power 1 & 2	Green	On: Power on Off: Power off		
Link/Act	Green / Orange	On: Green: Link active Orange: SFP link at combo port active Flashing: Data transmitting Off: Link not active		
Link Speed	Green	Off: 10Mbps On: 100Mbps		
	Orange	On: 1000 Mbps		
Alarm	Red	On: Error has occurred Off: No error present		





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7 Mode Setting

At the bottom right of the front face there is a **mode** button. To select an operating mode, power up the switch. When the LEDs of all ports go out, press the mode button for more than ten seconds. The four LEDs of ports 1 and 2 will flash, indicating that the device is ready for mode selection. The active state is then identified by the combination of the four flashing LEDs.

When the mode selection is started, the initial state is "Exit mode selection without changes." Select the desired mode by pressing the mode button.

Mode	Link/Act LED of Port 1	Link Speed LED of Port 1	Link/Act LED of Port 2	Link Speed LED of Port 2
Exit mode selection without changes	On	Off	Off	Off
Reset to factory default values	Off	On	Off	Off
Operate with a fixed IP address	Off	On	On	Off
Reset the IP configuration	On	On	On	Off
Operate in unmanaged mode	Off	On	Off	On

To exit the selected mode, press and hold down the MODE button for at least five seconds. The selected operating mode will then be saved and activated as soon as you release the MODE button.

Mode descriptions:

Reset to factory default values - When activated, all switch settings and configurations will be reset to factory defaults.

Operate with a fixed IP address - DHCP server is activated to assign IP to connected PC, and device has a fixed IP: 192.168.0.254.

Reset the IP configuration - Reset IP to default IP 192.168.1.10, subnet mask and default gateway to 0.0.0.0 only, but stored configurations are not reset.

Operate in unmanaged mode - The switch can be used without an IP address. The switch adopts the static IP address 0.0.0.0. The subnet mask and gateway are also 0.0.0.0. In this mode, web-based management can no longer be accessed, and the switch no longer sends BootP and DHCP requests.

NOTE: The device can only exit unmanaged mode by switching to a different mode or by resetting the switch to the factory default settings.

8 Connecting to the Web Interface

Log in to the switch by launching a web browser and entering 192.168.1.10 in the address bar.

Enter the default login ID: root (no password) and click "Login." The web GUI interface will display.

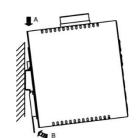
9 Grounding

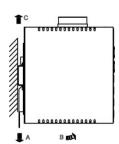
All devices must be grounded so that the data telegram is shielded from any possible malfunctions which can then be discharged to ground potential. A conductor of at least 2.5 mm² must be used for grounding. Grounding can be achieved by mounting the device onto a grounded DIN rail.

10 Other Information

DIN-Rail Assembly Startup, and Dismantling

- ➤ Place the Switch on the DIN rail from above using the slot. Push the front of the Switch toward the mounting surface until it audibly snaps into place.
- > Startup: Connect the supply voltage to start up the Switch via the terminal block.
- > Dismantling: Pull out the lower edge and then remove the Switch from the DIN rail.





Wall mounting (kit supplied separately)

Attach the wall mounting brackets to the switch with the supplied M3 (4mm) screws. Use the supplied four 4mm screws to secure the switch to the wall mount holes.



Power wiring information:

Use cable type - AWG (American Wire Gauge) 18-22 and corresponding pin type cable terminals. Use Copper conductors only.

Use torque value 5 lb-in, do not use excessive force when fixing wiring.

The rating of the power wire used must be at least 105°C.



If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired. For repair or maintenance needs, contact EtherWAN directly.

Informations de câblage d'alimentation:

Utilisez le type de câble - AWG (American Wire Gauge) 18-22. valeur de couple de 5 lb-in.

Le calibre du fil d'alimentation utilisé doit être d'au moins 105°C. DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT. Si la méthode d'utilisation de l'équipement diffère de celle décrite par le fabricant, la protection assurée par l'équipement risque d'être altérée. Contactez-nous pour l'entretien ou la reparation.

- Label clean up:
 - A dry cloth must be used to clean the labelling.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- The product is open type, intended to be installed in an industrial control panel or an enclosure.
- The installation safety of any system incorporating the equipment is the responsibility of the assembler of the system.

Manufacturer information:

ETHERWAN SYSTEMS, INC.

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