

SmartE Series

Hardened Managed 5 to 16-Port Fast/Gigabit Ethernet Switch



Overview

The SmartE series is a portfolio of hardened Layer 2 managed Ethernet switches. SmartE provides two mounting methods, DIN-rail and wall mounting, and comes in a fanless design that incorporates industrial grade components. This allows the SmartE to provide industrial-grade reliability and reliable operation in wide temperature ranges (-40 to 75 degrees C). By offering Layer 2 management features that are perfect for supporting network connectivity for industrial edge applications even in industrial and harsh environments. The SmartE Layer 2 Ethernet switches are available in both Fast Ethernet and Gigabit Ethernet configurations, offering 5 port, 8 port, or 16 port 10/100 or gigabit Ethernet copper ports, and 2 optional SFP fiber ports for network expansion, the SmartE series provides a reliable Layer 2 management network solution for critical applications.

EtherWAN — "When Connectivity is Crucial."

Highlight

+ Hardened Grade for Non-Ventilated & Harsh Environments

- Wide operating temperature -40 to 75°C (-40 to 167°F)
- Fanless design
- High impact, shock, and electrical noise resistance

+ Compliance

- UL 61010 certified for safety

+ Multiple Management Options

- Web-based management (HTTP/HTTPS)
- Role-based user management
- SNMP v1/v2/v3
- Command-line interface (Telnet, SSH)

+ Support

- Complimentary Technical Support
- Free Firmware Upgrades

Features

+ Interface

CLI, Telnet, Web GUI, SSH

+ Management

Firmware upgrade

Configuration backup

RMON (Remote Monitoring, SNMP only)

Port mirroring

SNTP (Simple Network Time Protocol)
synchronization

LLDP (Link Layer Discovery Protocol)

IPv4

SNMP v1/v2c/v3

DHCP Option 82, DHCP Server/Client

+ Security

MAC Address filtering

Enable/Disable port

Storm Control

System Logging

IEEE 802.1x LAN Access Control

IEEE 802.1x RADIUS Authentication

Complex password support

SSH for CLI and Telnet security

SSL and HTTPS for Web security



Quality of Service (QoS)

Priority Queues: 8 queues per port

Traffic classification based on IEEE 802.1p CoS (Cost of Service), DSCP (Differentiated Services Code Point), WRR (Weighted Round Robin) and strict mode

+ Layer 2 Features

Auto-negotiation for port speed and duplex mode

Flow Control

IEEE 802.3x full duplex mode

Back-pressure half duplex mode

Redundant Protocols

IEEE 802.1w RSTP

Large Tree Support

Fast Ring Detection

MRP (Manager/Client)*

*MRP will be available in Q1, 2023

VLANs

IEEE 802.1Q Tag VLANs

Link Aggregation

Static Trunk (4 groups)

IEEE 802.3ad LACP

IGMP Snooping v1/v2

+ Software Properties and Performance

Total VLAN Entries

32

Jumbo Frame Size

9K bytes (Gigabit Ethernet Models only)

Specifications

+ Interface

Ethernet

10/100BASE-T(X): 5, 6, 8, 14, or 16 ports

100BASE SFP: 0, or 2 ports

10/100/1000BASE-T(X): 6, 8, 12, or 16 ports

100/1000BASE SFP: 0, 2, or 4 ports

Alarm Contact

1 x Digital output, current capacity

Typ. 100mA, Max. 0.7A (1minute)

LED Indicators

Per Unit: Power 1 (Green), Power 2 (Green),
Alarm (Red)

Per Port: Link/Activity (Green; Orange: when
SFP link at Combo port), Speed (Off: 10Mbps;
Green: 100Mbps; Orange: 1000Mbps)

Mode Button

Exiting reset mode without changes

Resetting to the factory settings

Operating with a fixed IP address

Resetting the IP configuration

Operating in unmanaged mode

+ Technology

Standards

IEEE 802.3 10BASE-T

IEEE 802.3u 100BASE-TX/100BASE-FX

IEEE 802.3ab 1000BASE-T

IEEE 802.3z 1000BASE-SX/1000BASE-LX

IEEE 802.3x Full duplex and flow control

IEEE 802.3ad LACP

IEEE 802.1p QoS
IEEE 802.1Q Tag VLANs
IEEE 802.1w RSTP
IEEE 802.1ab LLDP
IEEE 802.1x Port-based Network Access Control
IEC 62439-2 MRP (Media Redundancy Protocol)*

*MRP will be available in Q1, 2023

Forward/Filtering Rate

14,880pps for 10Mbps
148,880pps for 100Mbps
1,488,000pps for 1000Mbps

Processing Type

Store-and-Forward
Auto-Negotiation
Half-duplex back-pressure full-duplex flow control
Auto MDI/MDIX

System Memory

4M bits

Flash Storage

8K MAC

+ Power

Input

12-57VDC Redundant

Power Consumption

8 ports: 8.55W Max
16 ports: 11.4W Max

Protection

Reverse Polarity Protection

+ Physical

Casing Material

Metal

IP Rating

IP30

Dimensions

5, 8 ports: 45 x 125.5 x 130mm (W x D x H)
16 ports: 85 x 125.5 x 130mm (W x D x H)

Weight

8 ports, 388g
16 ports, 676g

Installation Type

DIN-Rail
Panel mounting (Optional)

+ Environmental

Operating Temp.

-40 to 75°C (-40 to 167°F)

Storage Temp.

-40 to 85°C (-40 to 185°F)

Relative Humidity

10% to 95% (non-condensing)

MTBF

8 ports: 2,937,277.25 hours
16 ports: 2,255,206 hours

+ Regulatory

ISO

Manufactured in ISO-9001 facility

EMI

FCC Part 15B Class A

VCCI Class A

ICES-003

EN 61000-6-4

EMS

EN 61000-3-2

EN 61000-3-3

EN 61000-6-2

EN 61000-4-2 (ESD)

EN 61000-4-3 (Radiated RFI)

EN 61000-4-4 (Burst)

EN 61000-4-5 (Surge)

EN 61000-4-6 (Induced RFI)

EN 61000-4-8 (Magnetic Field)

Safety

UL 61010

Vibration

IEC 60068-2-6

Shock

IEC 60068-2-27

Free Fall

FED STD 101C Method 5007.1

+ Warranty

Length

3 Years

Details

www.etherwan.com/support/warranty-policy

+ What's Included

Device

Ethernet switch

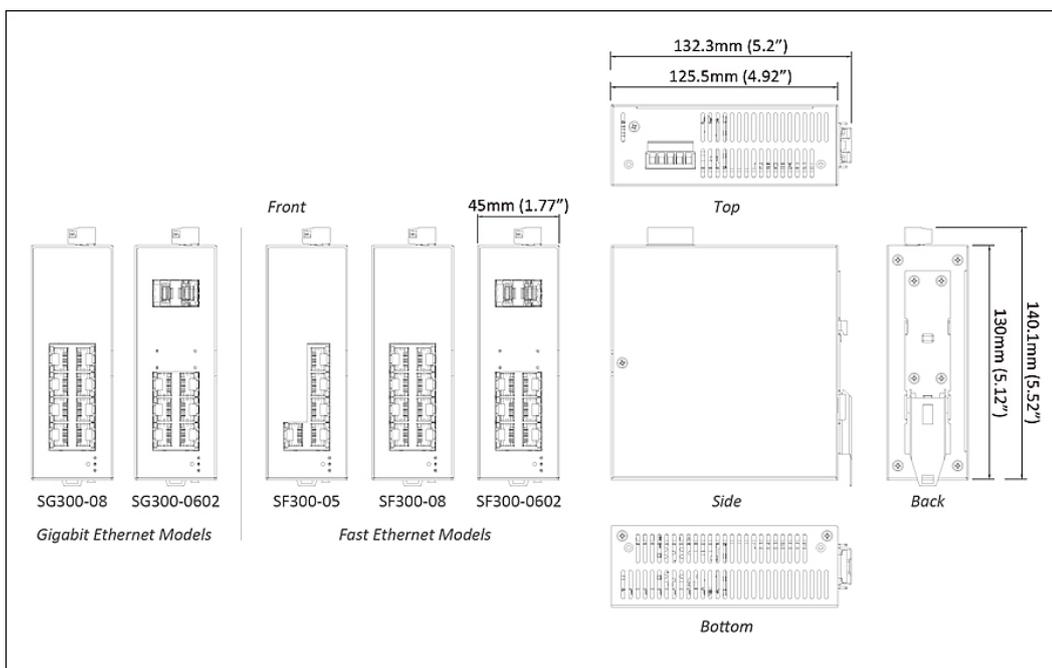
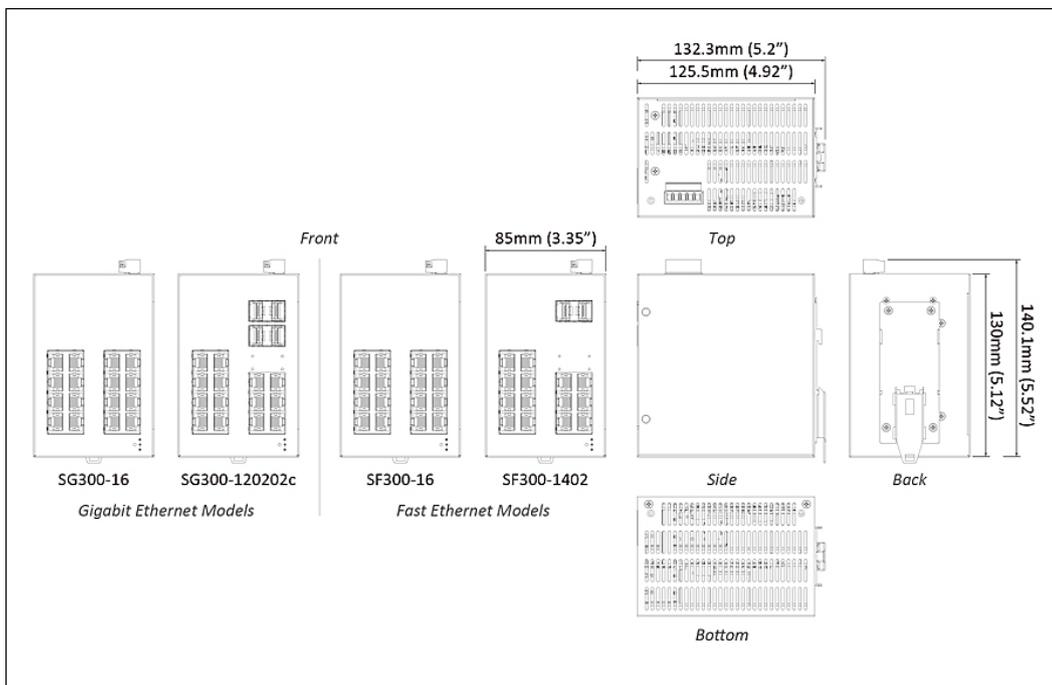
Installation

DIN-Rail bracket, screws

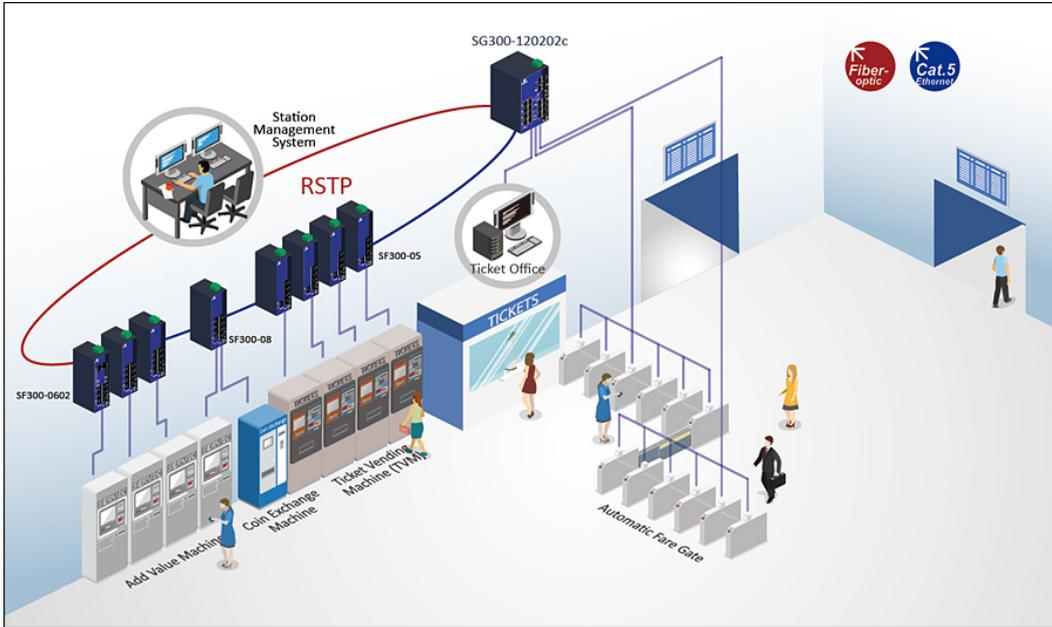
Documentation

Quick install guide

Dimensions



Application



Ordering Info

+ Model

Gigabit Ethernet Models

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 (EOL Notice)	16-port 10/100/1000BASE-T(X)
SG300-120202c (EOL Notice)	12-port 10/100/1000BASE-T(X) + 2-port 100/1000BASE SFP Combo + 2-port 100/1000BASE SFP

Fast Ethernet Models - [SF300 Series EOL Notice \(Click here\)](#)

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

+ Accessories

Hardened 100BASE SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Hardened Gigabit SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Panel Mounting Kit	www.etherwan.com/products/mounting-kits
<ul style="list-style-type: none"> • » KP-AA96-480 • » KP-S300 	

