

# SmartE Series

Hardened Lite Managed 5 to 16-port Fast/Gigabit Ethernet Switch



## Product Highlights

### 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

## Overview

The SmartE series is a portfolio of hardened lite managed Ethernet switches. SmartE offers a key set of Layer 2 management features that are perfect for supporting network connectivity for edge applications even in extreme environments. With a wide range of models available in both Fast Ethernet and Gigabit Ethernet configurations, offering up to 16 Ethernet ports and 2 optional SFP ports for network expansion, the SmartE series provides a reliable and cost-effective network management solution for critical applications.

## Ordering Information

### 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

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

# Software Features

<b>Interface</b>	+
CLI, Telnet, Web GUI	
<b>Management</b>	+
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	
<b>Security</b>	+
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	

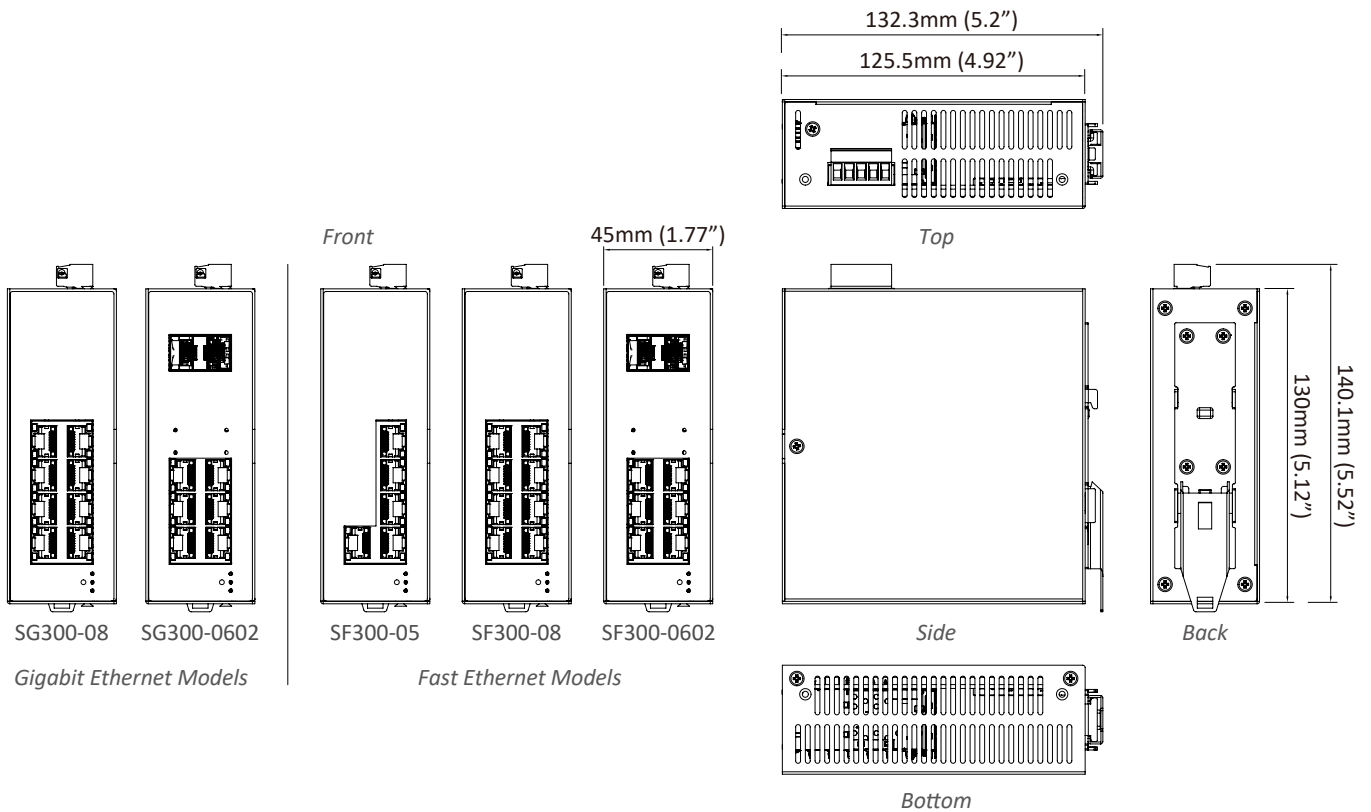
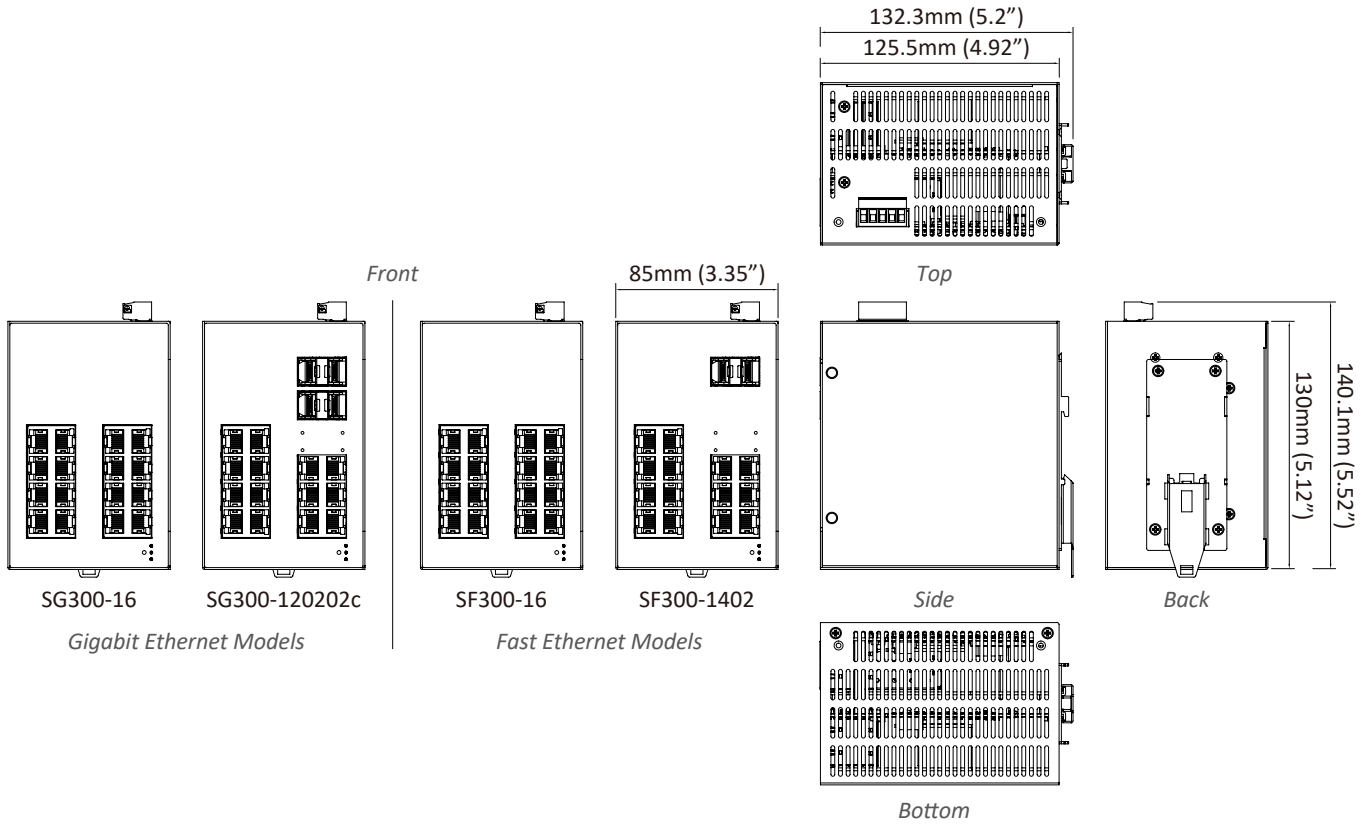
<b>Quality of Service (QoS)</b>	+
Priority Queues: 8 queues per port	
Traffic classification based on IEEE 802.1p CoS (Cost of Service), DSCP (Differentiated Services Code Point), WRR (Weighted Round Robin) and strict mode	
<b>Layer 2 Features</b>	+
<b>Auto-negotiation for port speed and duplex mode</b>	Flow Control IEEE 802.3x full duplex mode Back-pressure half duplex mode
<b>Redundant Protocols</b>	IEEE 802.1w RSTP Large Tree Support Fast Ring Detection
<b>VLANs</b>	IEEE 802.1Q Tag VLANs
<b>Link Aggregation</b>	Static Trunk (4 groups) IEEE 802.3ad LACP
IGMP Snooping v1/v2	
<b>Software Properties and Performance</b>	+
<b>Total VLAN Entries</b>	32
<b>Jumbo Frame Size</b>	9K bytes (Gigabit Ethernet Models only)

# Hardware Specifications

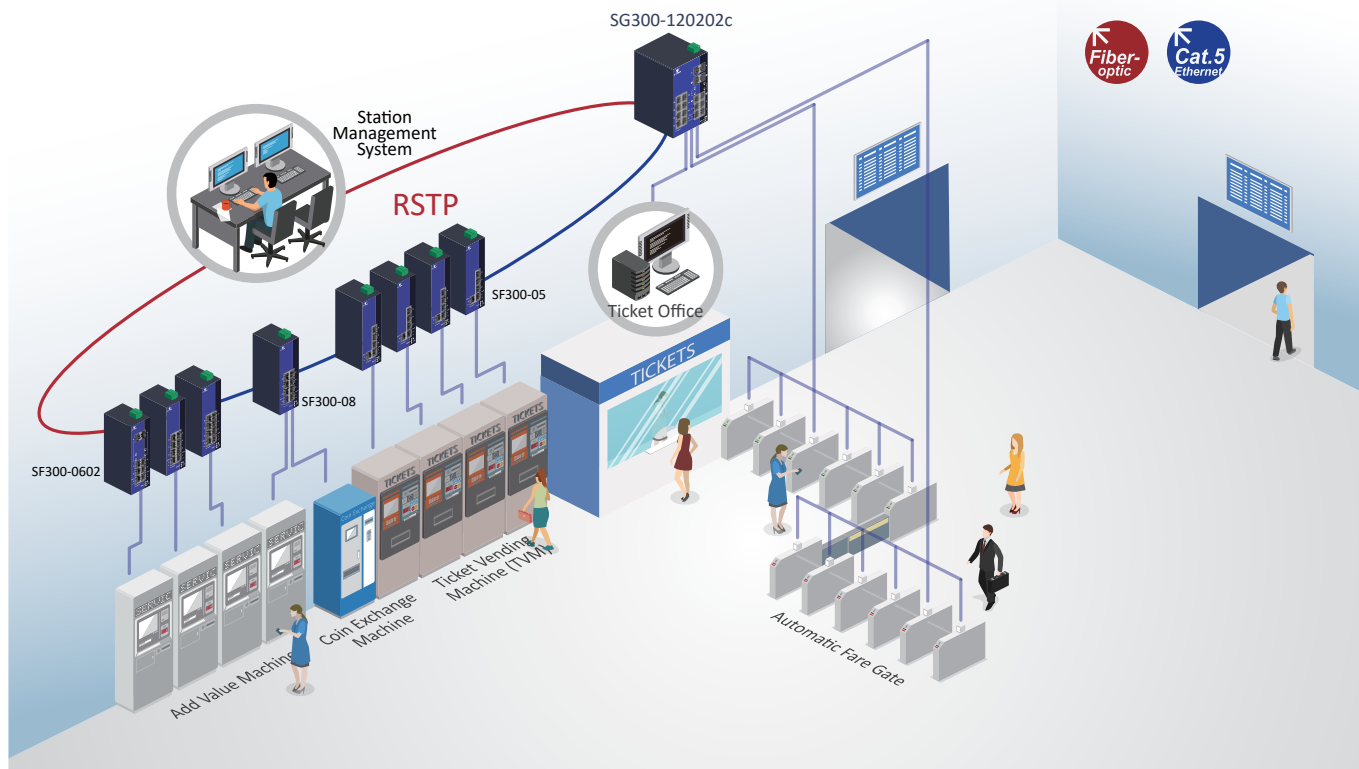
<b>Interface</b>		+
<b>Ethernet</b>	10/100BASE-T(X): 5, 6, 8, 14, or 16 ports 100BASE SFP: 0, or 2 ports 10/100/1000BASE-T(X): 6, 8, 12, or 16 ports 100/1000BASE SFP: 0, 2, or 4 ports	
<b>Alarm Contact</b>	1 x Digital output, current capacity Typ. 100mA, Max. 0.7A (1minute)	
<b>LED Indicators</b>	Per 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)	
<b>Mode Button</b>	Exiting reset mode without changes Resetting to the factory settings Operating with a fixed IP address Resetting the IP configuration Operating in unmanaged mode	
<b>Technology</b>		+
<b>Standards</b>	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	
<b>Forward/Filtering Rate</b>	14,880pps for 10Mbps 148,880pps for 100Mbps 1,488,000pps for 1000Mbps	
<b>Processing Type</b>	Store-and-Forward Auto-Negotiation Half-duplex back-pressure full-duplex flow control Auto MDI/MDIX	
<b>System Memory</b>	4M bits	
<b>Address Table Size</b>	8K MAC	
<b>Power</b>		+
<b>Input</b>	12-57VDC Redundant	
<b>Power consumption</b>	8 ports: 8.55W Max 16 ports: 11.4W Max	

<b>Protection</b>	Reverse Polarity Protection
<b>Physical</b>	+
<b>Casing Material</b>	Metal
<b>IP Rating</b>	IP30
<b>Dimensions</b>	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)
<b>Weight</b>	8 ports, 388g 16 ports, 676g
<b>Installation Type</b>	DIN-Rail Panel mounting (Optional)
<b>Environmental</b>	+
<b>Operating Temp.</b>	-40 to 75°C (-40 to 167°F)
<b>Storage Temp.</b>	-45 to 85°C (-49 to 185°F)
<b>Relative Humidity</b>	10% to 95% (non-condensing)
<b>MTBF</b>	8 ports: 2,937,277.25 hours 16 ports: 2,255,206 hours
<b>Regulatory</b>	+
<b>ISO</b>	Manufactured in ISO-9001 facility
<b>EMI</b>	FCC Part 15B Class A VCCI Class A ICES-003 EN 61000-6-4
<b>EMS</b>	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)
<b>Safety</b>	UL 61010
<b>Vibration</b>	IEC 60068-2-6
<b>Shock</b>	IEC 60068-2-27
<b>Free Fall</b>	FED STD 101C Method 5007.1
<b>Warranty</b>	+
<b>Length</b>	3 Years
<b>Details</b>	<a href="http://www.etherwan.com/support/warranty-policy">www.etherwan.com/support/warranty-policy</a>
<b>What's Included</b>	+
<b>Device</b>	Ethernet Switch
<b>Installation</b>	DIN-Rail bracket, screws
<b>Documentation</b>	Quick Install Guide

# Dimensions



# Application



## Accessories

Hardened 100BASE SFP Modules +

[www.etherwan.com/products/sfp-fiber-transceiver](http://www.etherwan.com/products/sfp-fiber-transceiver)

Hardened Gigabit SFP Modules +

[www.etherwan.com/products/sfp-fiber-transceiver](http://www.etherwan.com/products/sfp-fiber-transceiver)

Flat Panel Mounting Kit +

[www.etherwan.com/products/mounting-kits](http://www.etherwan.com/products/mounting-kits)