SmartE Series

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

c UL us LISTED

SFP Option

Wide Temperature

Fanless

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 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.

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

Interface

CLI, Telnet, Web GUI

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
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)

Hardware 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
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
Address Table Size	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.	-45 to 85°C (-49 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

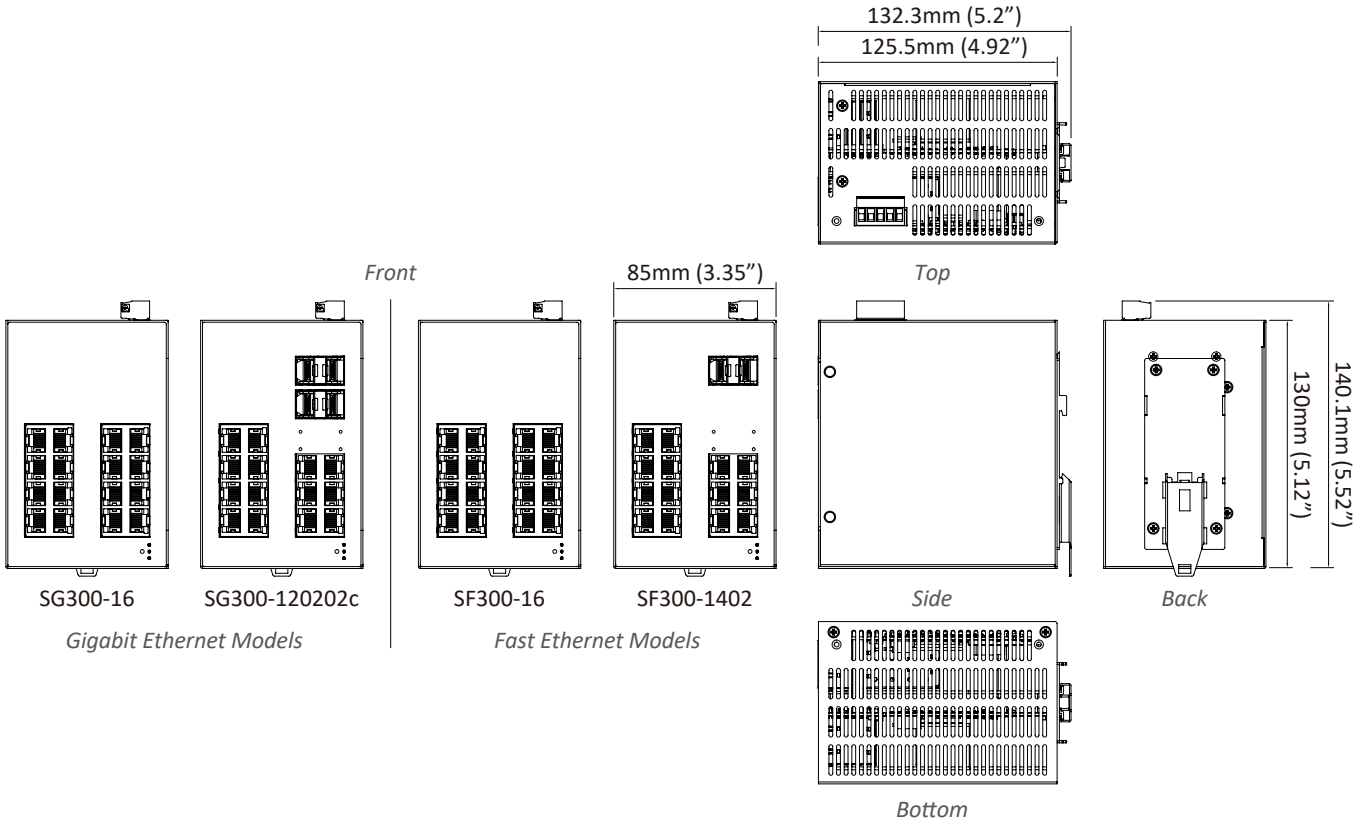
Warranty

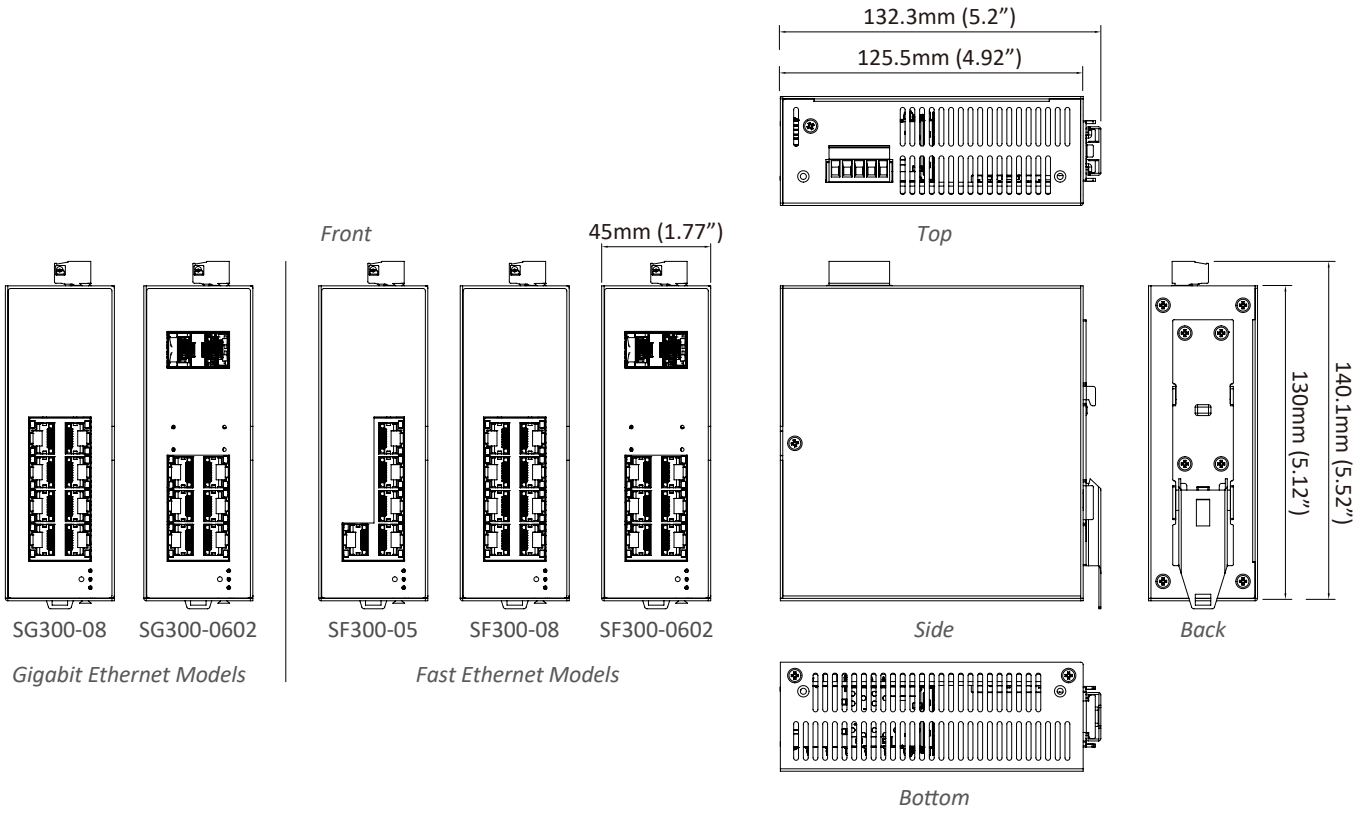
Length	3 Years
Details	www.etherwan.com/support/warranty-policy

What's Included

Device	Ethernet Switch
Installation	DIN-Rail bracket, screws
Documentation	Quick Install Guide

Dimensions


132.3mm (5.2”)
125.5mm (4.92”)
Front
85mm (3.35”)
Top
140.1mm (5.52”)
130mm (5.12”)
SG300-16
SG300-120202c
SF300-16
SF300-1402
Side
Back
Gigabit Ethernet Models
Fast Ethernet Models
Bottom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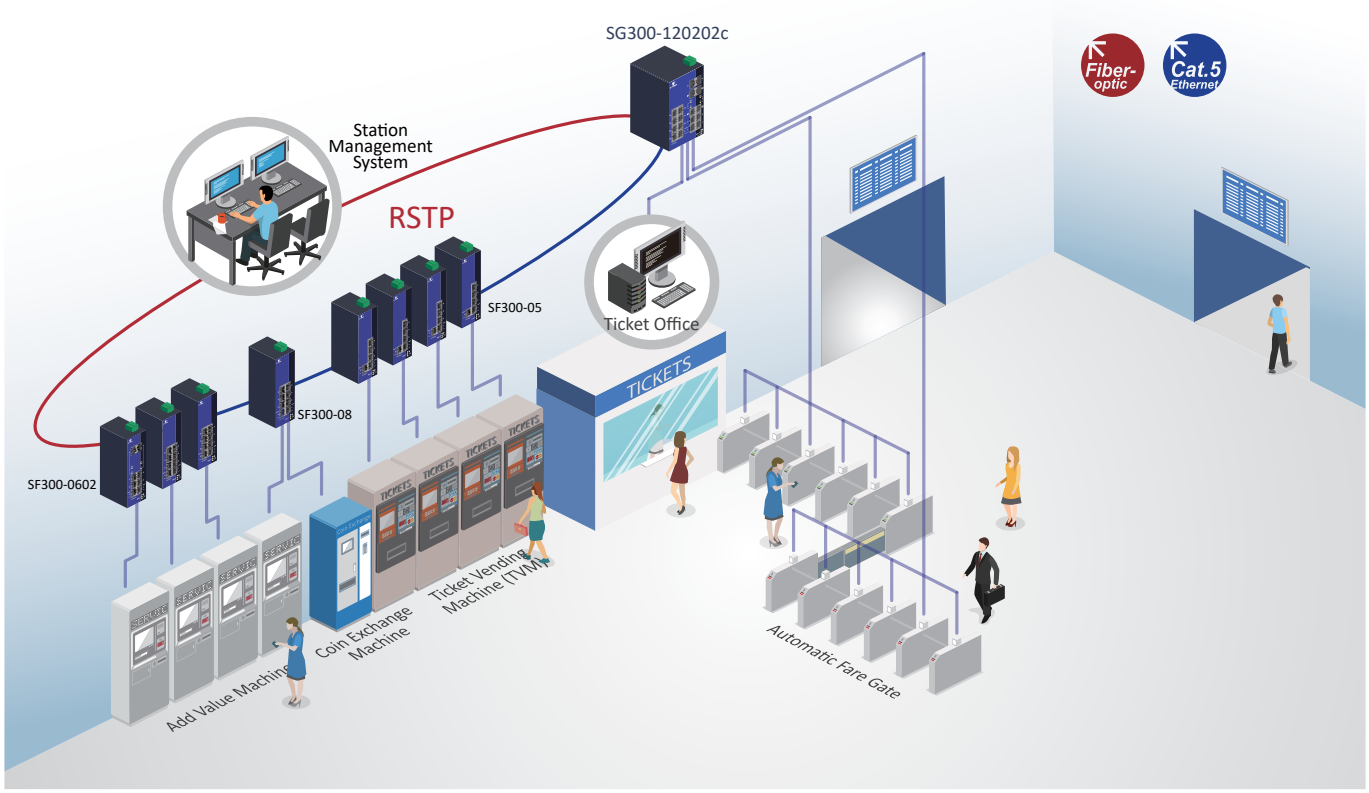
Application



Accessories

Hardened 100BASE SFP Modules +

www.etherwan.com/products/sfp-fiber-transceiver

Hardened Gigabit SFP Modules +

www.etherwan.com/products/sfp-fiber-transceiver

Flat Panel Mounting Kit +

www.etherwan.com/products/mounting-kits