

SmartE シリーズ

広範囲動作温度対応産業用5～16ポート ファースト/ギガビット イーサネットスイッチ



概要

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."

特長



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

動画

機能

+ 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

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)

仕様

+ 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

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.
-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

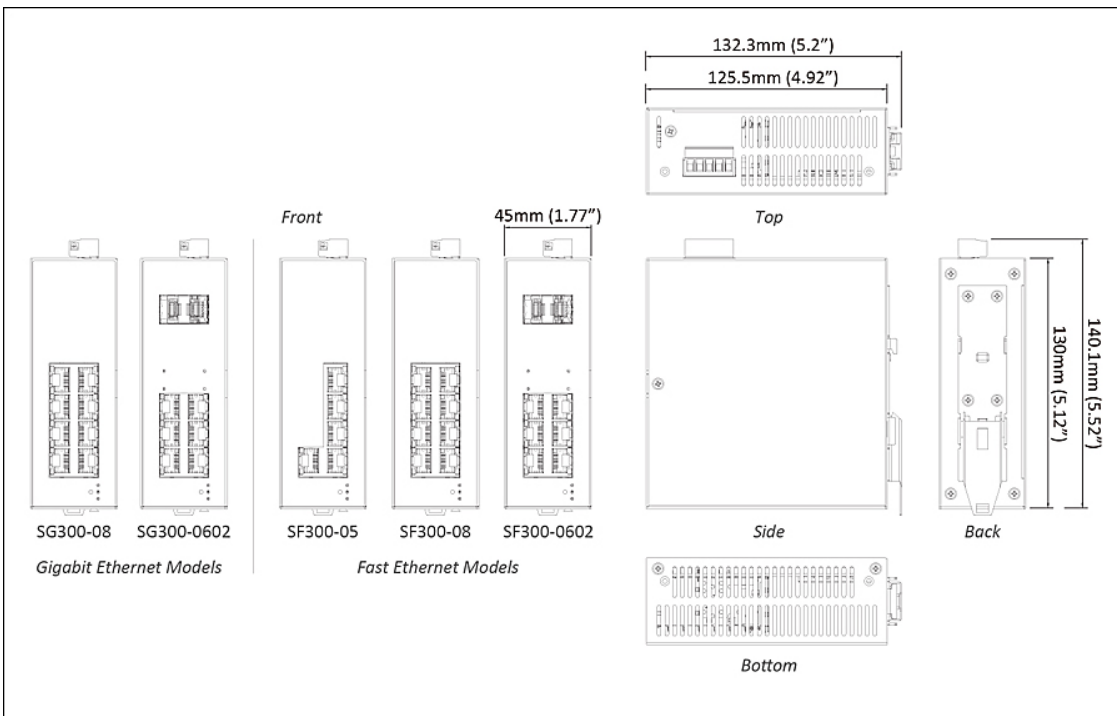
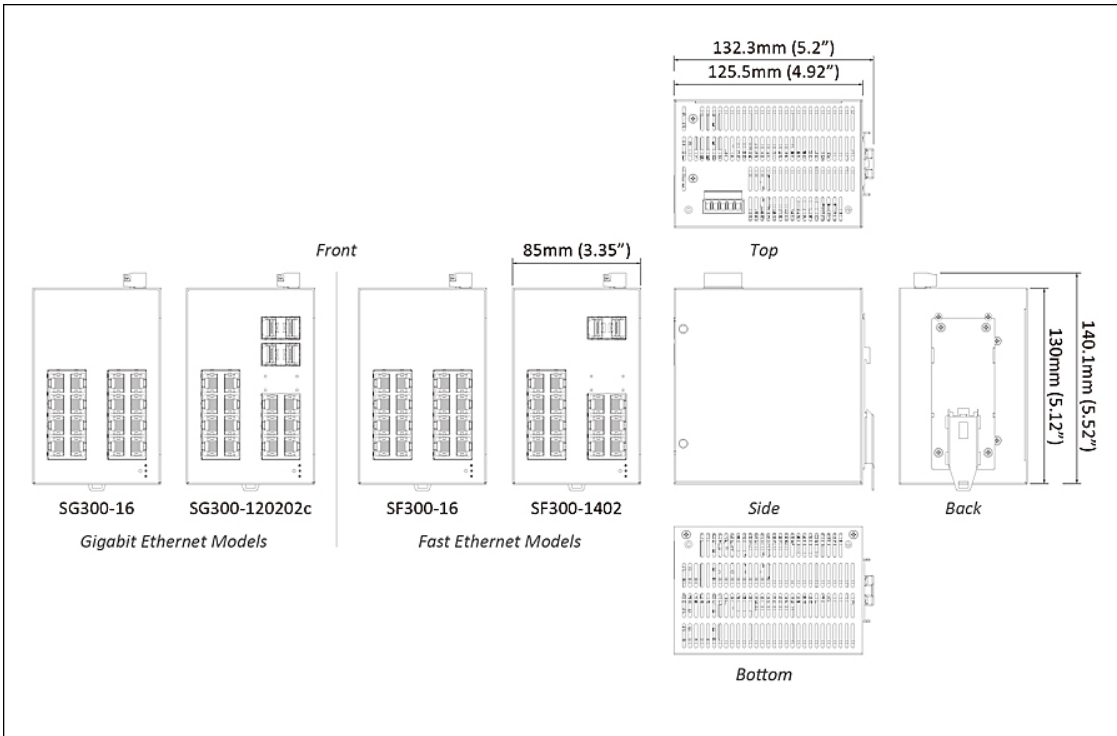
+ What's Included

Device
Ethernet switch

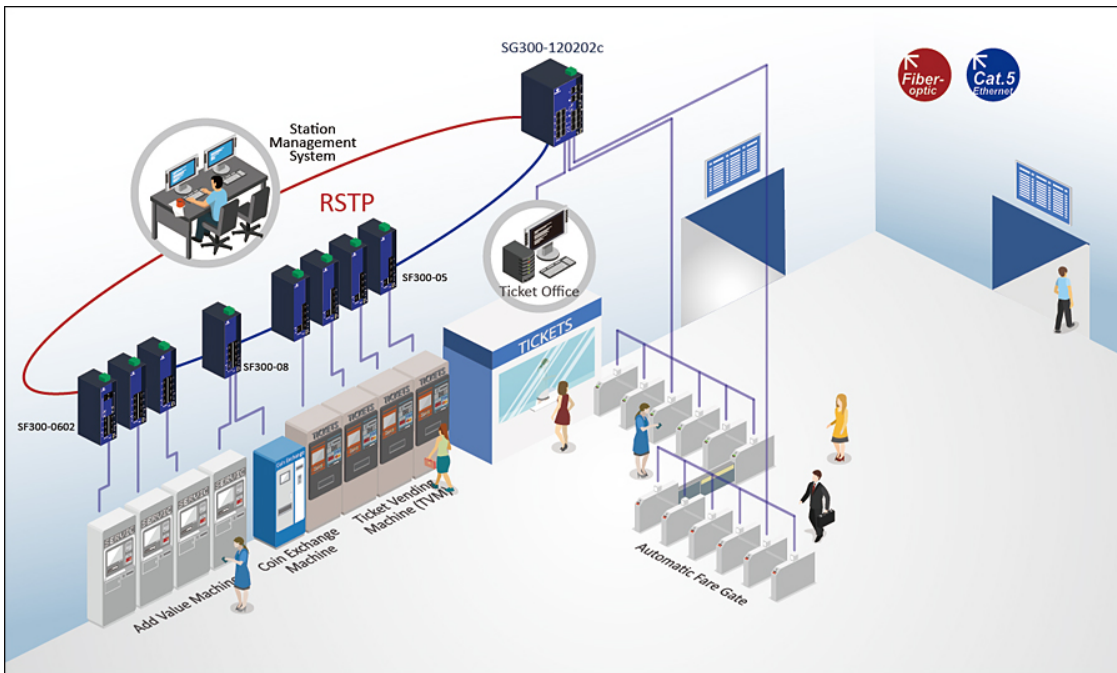
Installation
DIN-Rail bracket, screws

Documentation
Quick install guide

寸法図



応用例



製品型番

+ Model

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

+ 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

