



**EtherWAN**

[migrate-ed9.hellosanta.tw/jp/products/smarte-series](http://migrate-ed9.hellosanta.tw/jp/products/smarte-series) SmartE ????

SmartE ????

?????????????5 ~ 16??? ?????/????? ???????????





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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."

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## ? 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

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## 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)

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## 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

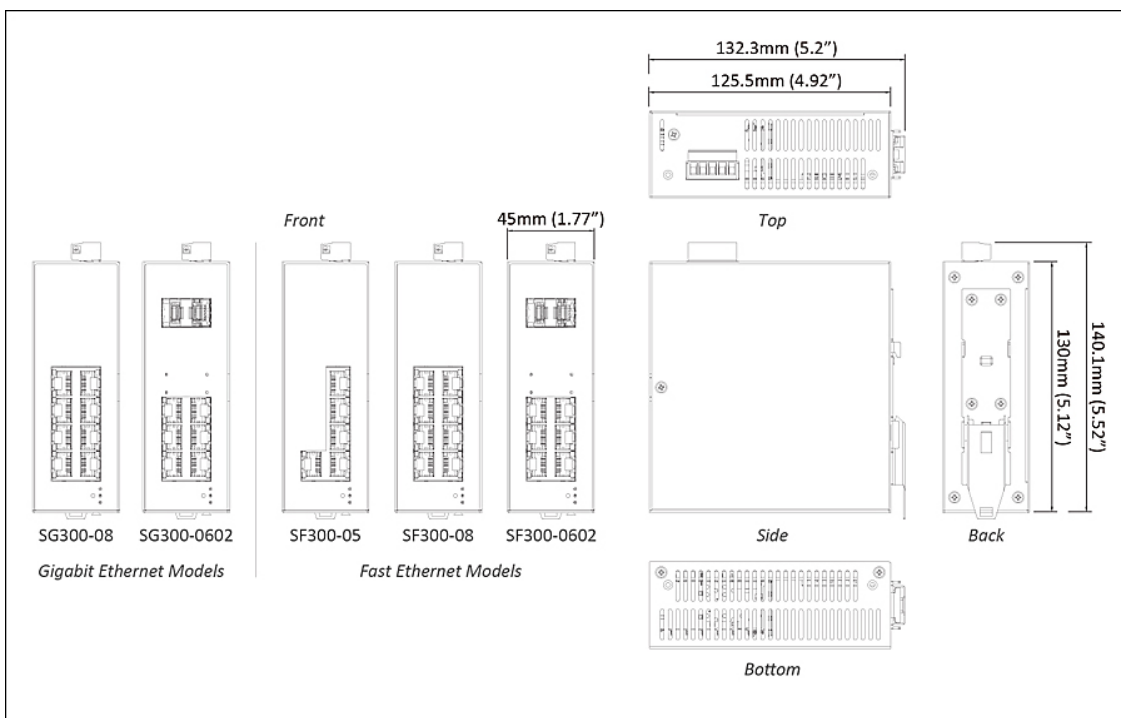
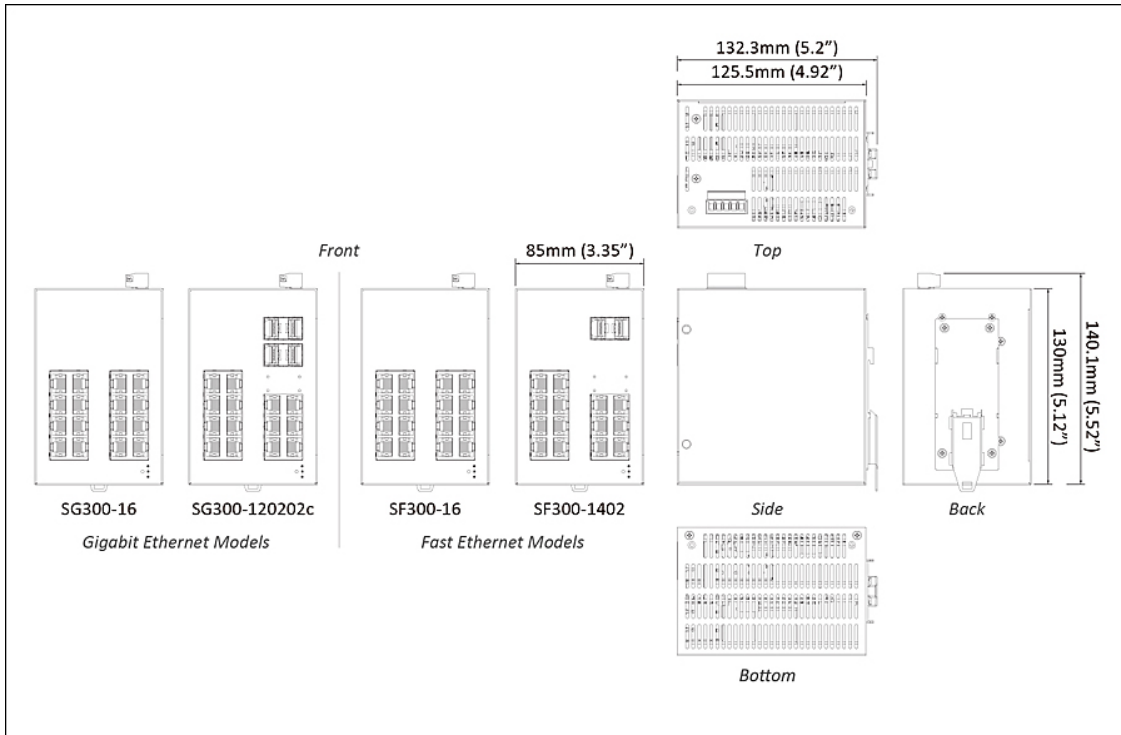
## Warranty

- Length
  - 3 Years
- Details

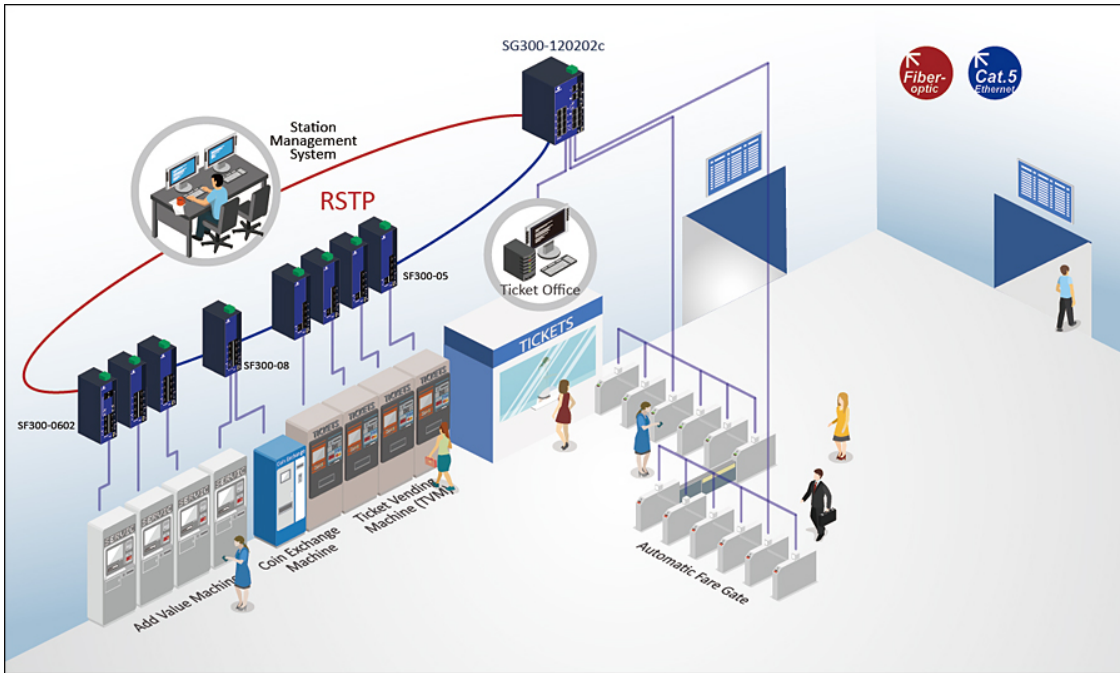
## What's Included

- Device
  - o Ethernet switch
- Installation
  - o DIN-Rail bracket, screws
- Documentation
  - o Quick install guide

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## 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](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)



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