

# SmartE 系列

強固級網管型 5 - 16 埠 Fast/Gigabit 乙太網路交換器



## 產品介紹

SmartE 系列是強固級第 2 層網管型乙太網交換器。SmartE 提供兩種安裝方法，DIN 導軌式安裝和壁掛式安裝，並採用工業級無風扇設計，使 SmartE 能夠在寬範圍的操作溫度（攝氏 -40 至 75 度）內提供工業等級穩定度，並且可靠地運行。透過第 2 層的網路管理功能，SmartE 非常適合用於工業邊緣應用端的網路連接，即便在惡劣的工業環境中也能順利運作。SmartE 支援全快速乙太網路(Fast Ethernet)連接埠或全Gigabit 的乙太網路連接埠，其提供 5 埠、8 埠或 16 埠的 RJ-45 銅線網路埠，以及最多 2 個 SFP Gigabit 光纖連接埠，可用於長距離網路傳輸。SmartE 系列專為關鍵工業應用需求所設計，是可靠的網路管理解決方案。

EtherWAN — "When Connectivity is Crucial."

## 產品亮點

### + 適用於不通風和惡劣環境的強固等級

- 40 至 75°C (-40 至 167°F) 寬工作溫度範圍
- 無風扇設計
- 高等級抗衝擊、防震動與抗電磁波干擾

### + 支援多種管理選項

- 網頁管理界面 (HTTP/HTTPS)
- 使用者權限管理 (角色類型)
- SNMP v1/v2/v3
- 命令列界面 (CLI, Telnet, SSH)

### + 安規

- UL 61010 安全認證

### + 支援

- 提供技術支援
- 免費韌體升級

## 軟體功能

### + 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  
MRP (Manager/Client)

**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)

## 硬體規格

### + 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

### + 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)

## + 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)

### 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

## + 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](http://www.etherwan.com/support/warranty-policy)

## + What's Included

### Device

Ethernet switch

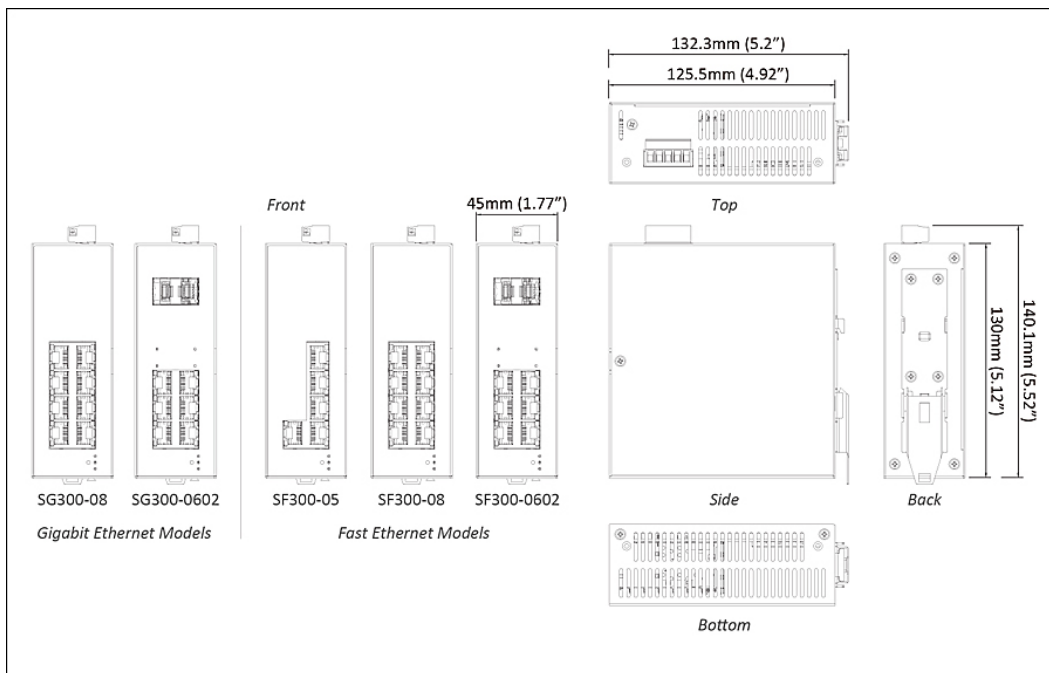
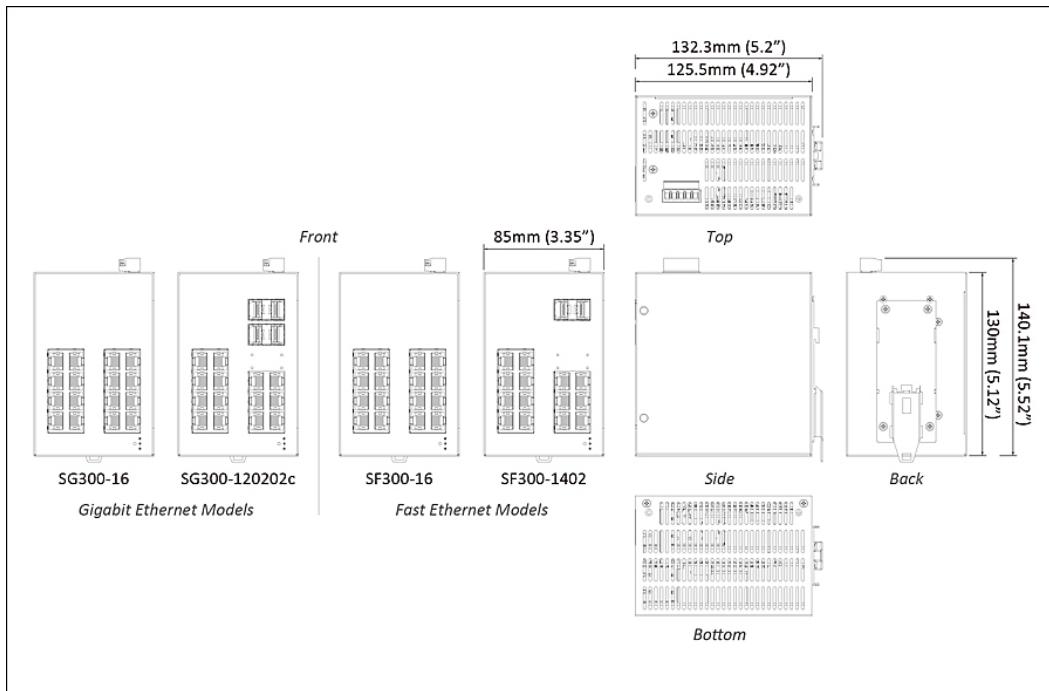
### Installation

DIN-Rail bracket, screws

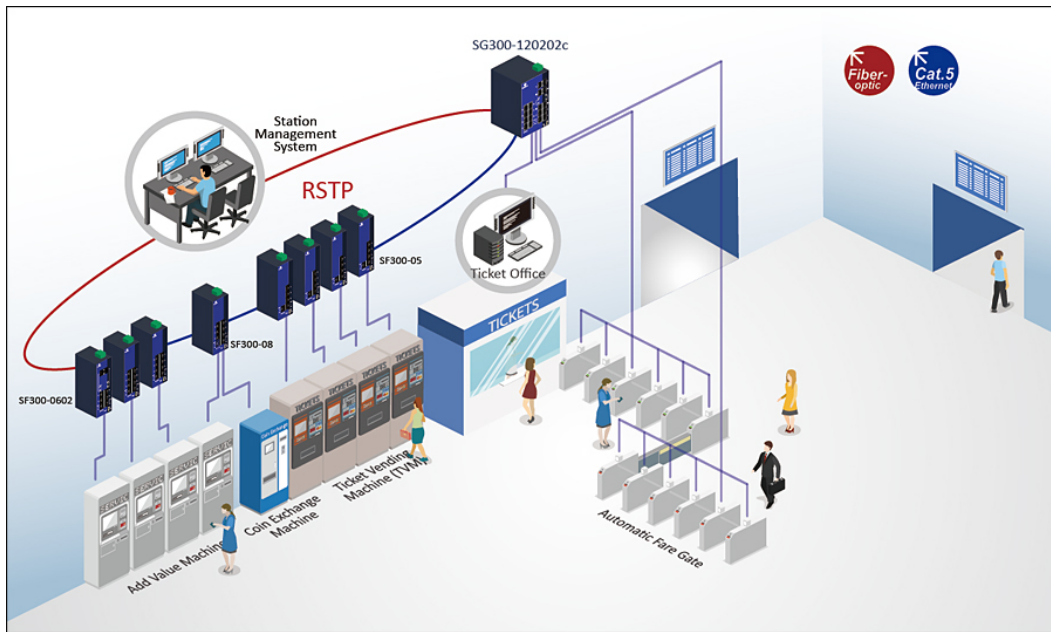
### Documentation

Quick install guide

# 產品尺寸圖



# 應用圖



## 訂購型號

### + Model

#### Fast Ethernet 型號

SF300-05	5埠10/100BASE-T(X)
SF300-08	8埠 10/100BASE-T(X)
SF300-0602	6埠 10/100BASE-T(X) + 2 埠 100BASE SFP
SF300-16	16埠 10/100BASE-T(X)
SF300-1402	14埠 10/100BASE-T(X) + 2 埠 100BASE SFP

#### Gigabit Ethernet Models

SG300-08	8 埠 10/100/1000BASE-T(X)
SG300-0602	6 埠 10/100/1000BASE-T(X) + 2埠 100/1000BASE SFP
SG300-16	16 埠10/100/1000BASE-T(X)
SG300-120202c	12 埠 10/100/1000BASE-T(X) + 2埠 100/1000BASE SFP Combo + 2埠 100/1000BASE SFP

### + 配件選購

強固級 100BASE SFP 模組	<a href="http://www.etherwan.com/tw/products/sfp-fiber-transceiver">www.etherwan.com/tw/products/sfp-fiber-transceiver</a>
強固級 Gigabit SFP 模組	<a href="http://www.etherwan.com/tw/products/sfp-fiber-transceiver">www.etherwan.com/tw/products/sfp-fiber-transceiver</a>
安裝配件	<a href="http://www.etherwan.com/tw/products/mounting-kits">www.etherwan.com/tw/products/mounting-kits</a>
» KP-AA96-480	
» KP-S300	

