

# IT-ES5028-IM-4GS-8F 16-ports 10/100M Ethernet + 8-ports 100Base-FX (SC/ST/FC) +

## 4-ports Gigabit (SFP slot) Managed Industrial Ethernet Switch

### Features

- Support IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE 802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W.
- SW-Ring™ ring network patent technology (Fault recovery time<20ms).
- Support RSTP, way exchange time<50ms.
- Support Port based VLAN and IEEE 802.1Q VLAN.
- Support absolutely and opposite priority, support IEEE802.1P, DSCP priority.
- Support Based Tag port Tag trunking, IEEE802.3ad, 2 group trunking link.
- Support MAC address learning, aging automatic.
- Support rate control, Broadcast storm control.
- Support configuration file up and download.
- Support WEB configuration.
- Support 8K MAC address.
- Support static and dynamic IGMP.
- Support bi-directional port mirroring.
- Support 1 channel relay alarm output.
- Industrial grade 4 design, -40~75°C work temperature.
- No fan design, 19 inch rack mounting.
- IP30 protection grade.



### Introduction

IT-ES5028-IM-4GS-8F is an industrial grade, managed and redundancy Ethernet switch which supports 16 Ethernet Ports, 8 Fiber ports and 4 Gigabit (SFP slot) ports. It provided some kinds of advanced network managed function, like as: SW-Ring redundancy ring network, VLAN, Trunking, Quality of Service, Speed control, port mirroring, fault alarm and firmware upgrade online. SW-Ring can bring your Ethernet to intelligent redundancy. Standard Industry design, can satisfied every requirement of the industry scene. All components used industry grade, it takes products high reliability. It

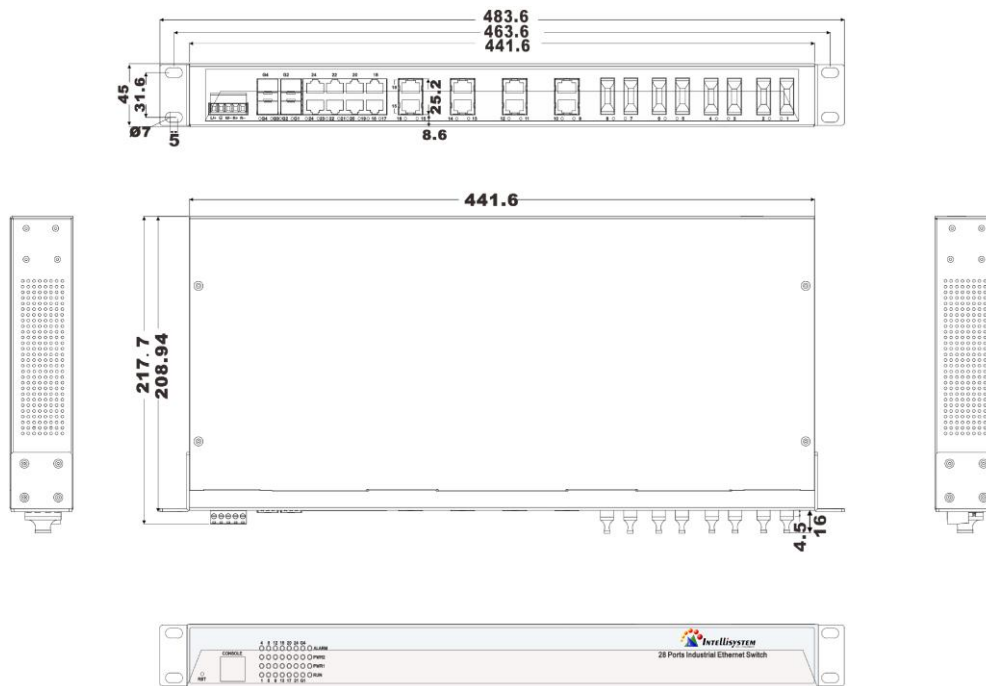
provided wide voltage power supply input.

SW-Ring™ is an arithmetic designed as a rapid redundancy network. It provided recover technology for fault of rapid redundant network, the recovery time<20ms.

Product accorded to CE, FCC standard and Industry grade 4 design requirement, support 1 channel power input and 1 channel relay alarm output, and -40~75°C working temperature, can meet all kinds of Industrial environment requirement. It can use in power, water conservancy, transportation area etc.

## Dimensions

### Unit (mm)



## Specifications

### Technology

Standard: Support IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W, IEEE802.3ad

Protocol: ARP, ICMP, TCP, DHCP, DNS, HTTP, Telnet, SW-Ring, RSTP, SNMP

Flow control: IEEE802.3x flow control, back press flow control

### Functions

Switch function: SW-Ring™, QOS, 802.1QVLAN, RSTP, SNMP, port trunking, static multicast filter, port mirroring, bandwidth management, broadcast storm control, port flow statistics, upgrade online, up and download configuration file, user name access system

SW-Ring: Support Single, Couple, Chain, Dual homing

### Exchange attributes

100M forward speed: 148810pps

1000M forward filter speed: 1488100pps

Transmit mode: store and forward

System exchange bandwidth: 12.8G

MAC address table: 8K

Memory: 4M

### Interfaces

Electric port: 10Base-T/100Base-TX auto speed control, Half/full duplex and MDI/MDI-X auto detect

100M optic fiber port: 100Base-FX, SC/ST/FC connector, support single-mode (20/40/60/80Km optional), multi-mode (2Km), wavelength: 1310nm, 1550nm

1000M fiber port: 1000Base-FX (SFP port)

Console port: debug serial port carry out CLI command

Alarm port: 2 bit terminal block

1 channel relay alarm output

### Transfer distance

Twisted cable: 100M (standard CAT5/CAT5e cable)

Multi-mode: 1310nm, 2/5Km

Single-mode: 1310nm, 20/40/60Km

1550nm, 80/100/120Km

### LED indicators

Run indicator: Run

Interface indicator: Link (1~24/G1~G4)

Power supply indicator: PWR

Alarm indicator: Alarm

**Power supply**

Input Voltage: 100~240VAC  
Type of input: 3 bits terminal block  
Overload current protect: 1.2A

**Consumption**

No-load consumption: 12.6W  
Full-load consumption: 18.3W

**Working environment**

Working temperature: -40~75°C  
Storage temperature: -40~85°C  
Relative Humidity: 5%~95% (no condensation)

**Mechanical Structure**

Shell: IP30 protect grade, metal shell  
Installation: 19" 1U rack  
Size (W×H×D): 441.6mm×45mm×208.9mm

**Industry Standards**

EMI: FCC Part 15, CISPR (EN55022) class A  
EMS: EN61000-4-2 (ESD), Level 4  
EN61000-4-3 (RS), Level 3  
EN61000-4-4 (EFT), Level 4  
EN61000-4-5 (Surge), Level 4  
EN61000-4-6 (CS), Level 3  
EN61000-4-8, Level 5  
Shock: IEC 60068-2-27  
Free fall: IEC 60068-2-32  
Vibration: IEC 60068-2-6

**Certifications**

CE, FCC, RoHS, UL508 (Pending)

**Warranty:** 5 years

**Ordering Informations**

**IT-ES5028-IM-4GS-8F (M):** 16 ports 10/100Base-T(X) + 8 ports 100Base-FX Multi-mode SC/ST/FC + 4 ports gigabit (SFP slot), 100-240VAC

**IT-ES5028-IM-4GS-8F (S):** 16 ports 10/100Base-T(X) + 8 ports 100Base-FX Single-mode SC/ST/FC +4 ports gigabit (SFP slot), 100-240VAC

**IT-ES5028-IM-4GS-8F (SS):** 16 ports 10/100Base-T(X) + 8 ports 100Base-FX single-mode, single fiber SC/ST/FC + 4 ports gigabit (SFP slot), 100-240VAC

**Packing List**

1. Ethernet switch IT-ES5028-IM-4GS-8F (plus terminal block) ×1
2. User manual ×1
3. CD ×1
4. Certificate of quality ×1
5. Warranty card ×1
6. Power cable ×1