

# IT-ES618-IM-4F-4D(RS-485)-P(12-48VDC)

**4 ports 10/100 Base-TX + 4 ports 100M fiber + 4 ports RS485/422 Managed Industrial Ethernet Switch**

## Features

1. Support 4 ports 10/100Base-TX + 4 ports 100M fiber + 4 ports RS485/422.
2. Support SW-Ring™ redundant network patent technology (Faulty recovery time<20ms).
3. Support IEEE802.1Q VLAN configuration, Control broadcast storm effectively.
4. Support port bandwidth limited function, optimize bandwidth utilize.
5. Support IEEE802.1p, QOS.
6. Support RSTP.
7. Support SNMP.
8. Support based on socket application access.
9. Support Sever, Client, UDP based mode and Sever, UDP advanced mode.
10. Support Windows serial driver procedure mode.
11. Support TCP, UDP, ARP, ICMP and DHCP protocol.
12. Support cross-gateway and cross-router communication.
13. Specific serial self-adapt function (Realm).
14. Support Web, CLI, and Telnet management.
15. Support 2K MAC address table.
16. Support 2 power supply input and 1 relay alarm output.
17. Support port line and redundant network faulty/unusual, local and remote alarm.
18. Support IGMP snooping, static multicast filter, port trunking and port mirroring.
19. High strength iron shell, IP40 protection.
20. Industrial 4 class design.
21. Redundant 24VDC power supply input (12~48VDC).
22. -40~85°C working temperature.
23. DIN-rail, wall mounting installation.



## Introduction

IT-ES618-IM-4F-4D(RS-485)-P(12/48VDC) is an industrial, management, redundant industrial Ethernet switch and integrate 4 ports RS485/422 serial device server, it support 4 ports 10/100M Ethernet (RJ45), 4 ports 100M fiber, 4 ports RS485/422, 2 redundant 12~48VDC power input and 1 relay alarm output, it adopt SW-Ring™ redundant technology (Recovery time<20ms). Users can set the redundant easily to increase network reliability, furthermore, it can also support numerous intelligent network management functions,

like as IGMP, RSTP, 802.1Q VLAN, QOS, port trunking and port mirroring etc. It adopted no fan, low power consumption design, IP40, corrugate high strength iron shell, the performance is more steadily. It accorded with CE, FCC standard and Industrial 4 class, DIN rail installation and wide operating temperature (-40~85°C), it can satisfied some kinds of industrial environment, it can provide reliable and quickly solution for your Ethernet device.

## Specifications

### Technology

Standard: IEEE802.3, IEEE802.3u, IEEE 802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W

Protocol: ARP, ICMP, TCP, UDP, DHCP, DNS, HTTP, Telnet, SW-Ring™

Flow control: IEEE802.3x, backpressure control

### Functions

Function: SW-Ring™, QOS, 802.1Q VLAN, port-trunking, static multicast filter, port mirroring, Broadcast storm control, flow statistics, upgrade online, up and download configuration file

SW-Ring™: Single, Couple, Chain, Dual homing ring.

Serial device server: 4 port serial device sever, each port support 4pcs TCP or UDP session connection

### Interfaces

100M Ethernet: 10/100Base-TX self-adapt RJ45 port.

100M fiber port: 100Base-FX (SC/ST/FC)

Console port: Procedure debug (RS-232), RJ45

Alarm port: 2 bit 7.62mm terminal block,

1 channel relay alarm output

### Serial

RS-422 signal: T+, T-, R+, R-, GND

RS-485 signal: D+, D-, GND

Parity: None, Even, Odd, Space, Mark

Data bit: 5bit, 6bit, 7bit, 8bit

Band rate; 300~115200bps

Direction control: RS485 side adopt ADDC technology, auto detect and control data transfer direction

Loading: RS-485/422 side support 32 nodes loop back

Protection: 2KV isolation, 15KV static protection.

Connector: 5 bit terminal block

### Transfer distance

Twisted cable: 100m (CAT5/CAT5e)

Multi mode fiber: 1310nm, 2Km

Single mode fiber: 1310nm, 20K, 1310nm, 40Km  
1310nm, 60K, 1550nm, 80Km

RS-485/422: 1200m

### Exchange attributes

100M transmit speed: 148810pps

Transfer: Store and forward

System exchange bandwidth: 1.6 G

Buffer memory: 1MKbits

Support 2K MAC address table

### LED indicators

Power supply indicator: PWR

Alarm indicator: Alarm

System indicator: Run

Ethernet port indicator: Link/Act (1-8)

Serial port indicator: TX (1-4), RX (1-4)

### Power supply

Input voltage: 24VDC (12~48VDC)

Terminal block: 4 bits 7.62mm terminal block

None load consumption: 4.8W@24VDC

Full load consumption: 6.9W@24VDC

Support inside over-current 4.0A protection

Support opposite connection protection

### Mechanical

Shell: IP40, high strength iron shell.

Installation: DIN Rail

Dimensions (W×H×D): 160 mm×70mm×130mm

Weight: 1021g

### Environmental

Operating Temperature: -45°C to 85°C

Storage Temperature: -45°C to 85°C

Relative Humidity: 10 to 95% (non-condensing)

### 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(PFM), Level 5

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

### Warranty

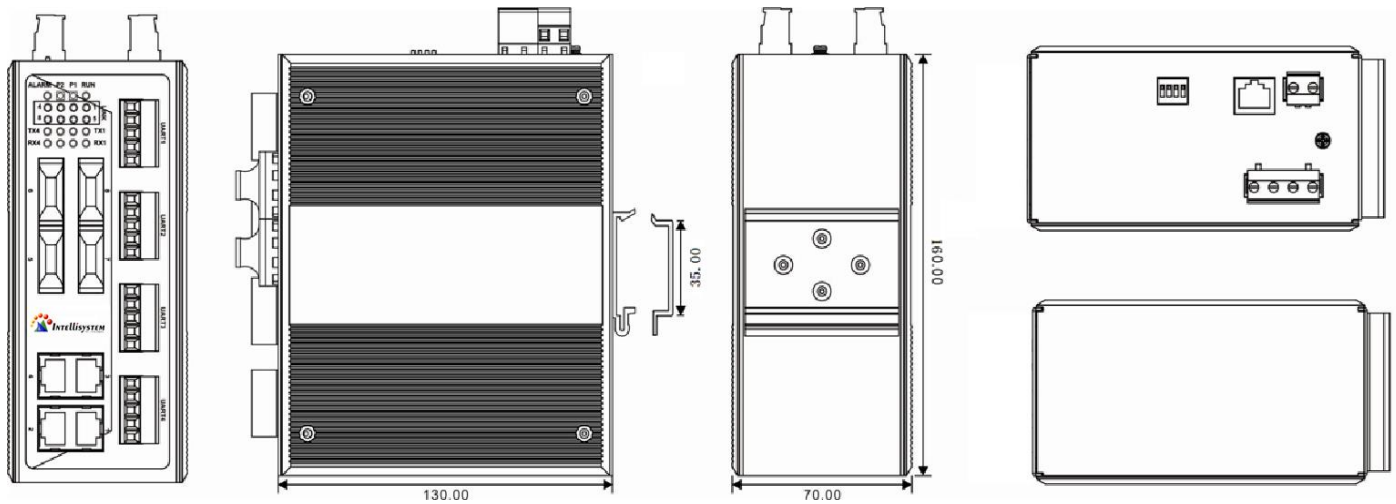
Warranty time: 5 years

### Certifications

CE, FCC, RoHS, UL508 (Pending)

## Dimensions and appearance

Unit (mm)



2

## Ordering informations

Option model	Port				Power supply
	100M Ethernet	100M fiber (SC/ST/FC) SM or MM	Serial port		
			RS-232	RS-485/RS-422	
IT-ES618-IM-4F-4D(RS-485)-P(12/48VDC)	4	4	—	4	12~48VDC
IT-ES618-IM-4F-4D(RS-232)-P(12/48VDC)	4	4	4	—	
IT-ES618-IM-2F-4D(RS-232)-P(12/48VDC)	6	2	4	—	
IT-ES618-IM-2F-4D(RS-485)-P(12/48VDC)	6	2	—	4	
IT-ES618-IM-4D(RS-485)-P(12/48VDC)	8	—	—	4	
IT-ES618-IM-4D(RS-232)-P(12/48VDC)	8	—	4	—	