# IES6116-4F

**12-port 10/100M Ethernet+ 4-port 100Base-FX(SC/ST/FC)**

**Managed Industrial Ethernet Switch**

## *Features*

- Support IEEE802.3, IEEE802.3u, 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 WEB configuration
- Support Port based VLAN and IEEE 802.1Q VLAN
- Support absolutely and opposite priority, support IEEE802.1P, DSCP priority
- Store and Forward switching process type
- Support MAC address auto-learning, auto-aging
- Support 8K MAC address
- Support 12.8Gbps backboard bandwidth
- Support redundancy power supply(12～48VDC)
- Support 1 channel relay alarm output
- Operating temperature range from -40 to 75°C
- DIN rail mounted
- Metal shell, IP40 protection class



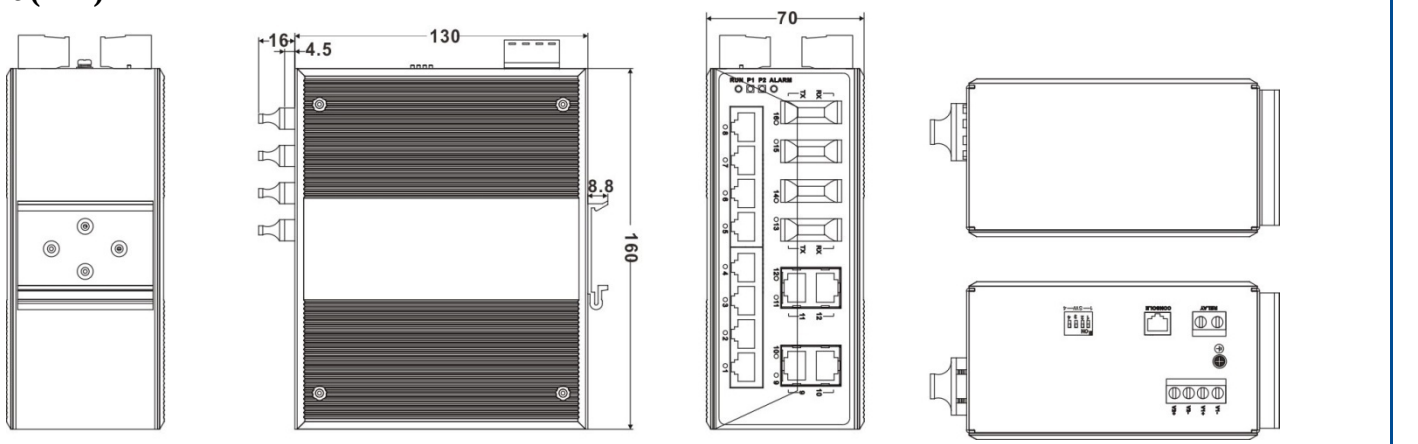
## Introduction

IES6116-4F is an industrial grade, managed and redundancy Ethernet switch which supports 12 Ethernet ports and 4 Fiber 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. Standard Industry design, can satisfied every requirement of the industry scene. All components used industry grade, it takes products high reliability.

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 2 redundant power input and 1 channel relay alarm output, and -40～75℃ working temperature, can meet all kinds of Industrial environment requirement.

## Dimension

**Unit (mm)**



## Specification

**Technology**

Standard: Support 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, RSTP, SNMP

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

**Function**

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 attribute:**

100M forward speed: 148810pps

100M maximum filter speed: 148810pps

Transmit mode: store and forward

System exchange bandwidth: 12.8G

MAC address table: 8K

Memory: 3M

**Interface**

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

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, 2Km

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

1550nm, 80/100/120Km

**LED indicator:**

Run indicator: Run

Interface indicator: Link (1~16)

Power supply indicator: P1, P2

Alarm indicator: Alarm

**Power supply**

Input Voltage: 24VDC (12~48VDC)

Input method: 4 bits 7.62mm terminal block

Support DC dual power supply redundancy

Overload current protect: 1.2A

### Consumption

No-load consumption: 7.68W@24VDC

Full-load consumption: 9.55W@24VDC

**Working environment:**

Working temperature: -40～75℃

Storage temperature: -40～85℃

Relative Humidity: 5%~95 %( no condensation)

### Mechanical Structure:

Shell: IP40 protect grade, metal shell

Installation: DIN rail and wall mount

Size (W×H×D): 160mm×70mm×130mm

### Industry Standard:

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

**Certification**

CE, FCC, RoHS, UL508 (Pending)

**Warranty:** 5 years

## Ordering Information

IES6116-4F (M): 12 port 10/100Baes-T(X) + 4 port 100Base-FX Multi-mode, 12-48VDC

IES6116-4F (S): 12 port 10/100Baes-T(X) + 4 port 100Base-FX Single-mode, 12-48VDC

IES6116-4F (SS): 12 port 10/100Baes-T(X) + 4 port 100Base-FX single-mode, single fiber SC/ST/FC, 12-48VDC

## Packing List

1. Industrial Ethernet switch IES6116-4F (plus terminal block) × 1
2. User manual x 1
3. CD x 1
4. Certificate of quality x 1
5. Warranty card x 1