

# IES7116G-8GS Full Gigabit Managed DIN-Rail Industrial Ethernet Switch

## 8 10/100/1000Base-T(X) Ports + 8 1000Base-SFP Interfaces

### Features

- ◎ Supports 8 10/100/1000Base-T(X) ports + 8 1000Base-SFP interfaces
- ◎ Supports SW-Ring ring network patent technology (failover time <20ms)
- ◎ Supports STP/RSTP/MSTP spanning tree protocol, increase the network stability
- ◎ Supports IEEE802.1Q VLAN, MAC VLAN, IGMP Snooping, GMRP and other functions
- ◎ Supports Port speed limit, Link aggregation, Port Mirroring, Port Statistics and other configuration
- ◎ Supports access control, ACL, 802.1X certification and other network security configuration
- ◎ Supports SSH, TELNET, HTTPS and other system configuration and various network diagnosis methods
- ◎ Supports QoS, LLDP, SNMP v1/v2c, DHCP Server and other functions
- ◎ Supports redundant 12~48VDC power supply input, 1 channel relay power supply/port alarm output
- ◎ Working temperature range - 40~75°C
- ◎ Adopts no fan, industrial grade, DIN-Rail mounting design
- ◎ Supports IP40 protect grade, metal shell

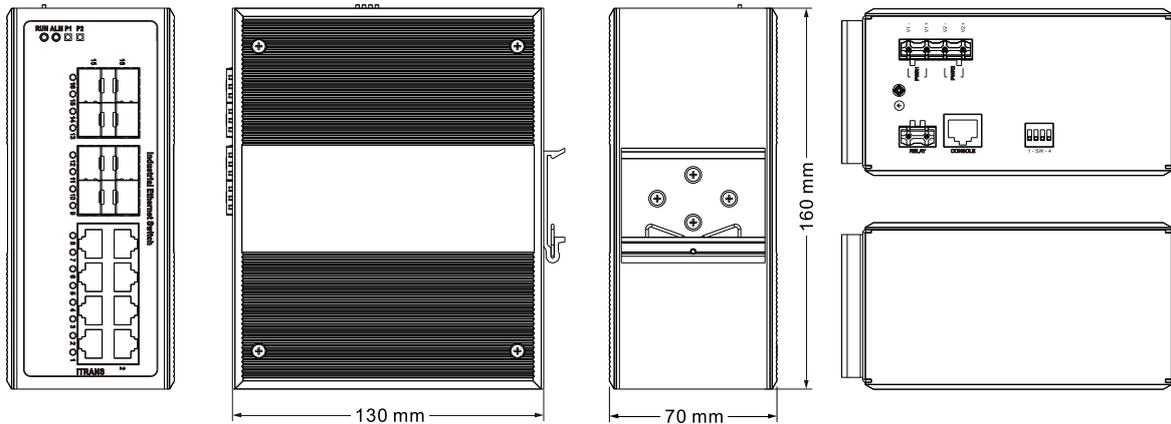


### Introduction

IES7116G-8GS is full Gigabit managed DIN-Rail industrial Ethernet switch with high performance and cost performance. The product supports 8 10/100/1000Base-T(X) ports and 8 1000Base-SFP interfaces. The product provides various advanced management functions, such as: SW-Ring, VLAN, IGMP Snooping, GMRP, DHCP Server/Client, STP/RSTP/MSTP, QoS, Mirror, LLDP, SNMP v1/v2c, CLI command line, Web network management, SSH, TELNET management method, making device management more convenient and safer coordinated with enhanced ACL control function and anti-attacking function. SW-Ring technology is a rapid ring network arithmetic developed by 3onedata. It provides rapid ring network failure recovery technology with a failover time of less than 20ms. This series switches adopt no fan, low power consumption and industrial 4 grade design, which can adapt to rugged industrial environment of -40~75°C working temperature range. It can satisfy various industrial scene requirements and provide economic solutions.

## Dimension

Unit (mm)



## Specification

### Technology

Standard: IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.1D, IEEE802.1W, IEEE802.1s, IEEE802.1Q, IEEE802.1p, IEEE802.1X, IEEE 802.3ad

**Protocol:** ARP, ICMP, TCP, UDP, DHCP, DNS, HTTPs, Telnet, SSH, QoS, VLAN, SW-Ring, STP, RSTP, MSTP, SNMP, IGMP Snooping, GMRP, LLDP, NTP

Flow control: IEEE802.3x flow control, Back Pressure

### Function

Switch function: SW-Ring, QoS, VLAN, MSTP, SNMP, ACL, LLDP, RMON, DHCP, GMRP, IGMP Snooping, 802.1X Certification, Link Aggregation, Static Multicast, Mirror, Port VLAN, Storm Control, Port Statistics, Diagnostic Test, Online Upgrading, Upload and download configuration file, username login system, etc.

SW-Ring: Supports Single, Couple, Chain, Dual homing and other ring network structure

### Exchange attributes

Transmit mode: store and forward  
1000M forward speed: 1488100pps  
Backplane bandwidth: 56G  
MAC address table: 16K  
Memory: 12Mbit  
Forward delay: <5μs

### Interface

Ethernet RJ45 port: 10/100/1000Base-T(X), flow control, MDI/MDI-X self-adapting

SFP interface: 1000Base-SFP

Console port: CLI command line management port (RS-232), RJ45

Alarm interface: 2-pin 7.62mm terminal blocks  
1 channel relay alarm information output

### Transfer distance

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

Fiber: Multimode 1310nm, 2Km

Single mode 1310nm, 10/20/40Km

Single mode 1550nm, 60/80/100/120Km

### LED Indicator

Power supply indicator: P1/ P2

System alarm indicator: ALM

Device running indicator: RUN

Ethernet port connection

/running indicator: Link/Act(1-16)

### Power supply

Input voltage: 12~48VDC

Access terminal: 4-pin 7.62mm pitch terminal blocks

No-load consumption: 10.99W@24VDC

Full-load consumption: 20.69W@24VDC

Support dual redundant DC power supply back-up, built-in overcurrent protection

### Mechanical Structure

Shell: IP40 protect grade, metal shell

Installation: DIN-Rail mounting

Weight: 1.1kg

Size (L×W×H): 130mm×70mm×160mm

**Working environment**

Working temperature: -40~75℃

Storage temperature: -40~75℃

Humidity: 5%~95% (no condensation)

**Industry standard**

EMI: FCC Part 15, CISPR (EN55022) class A

EMS: IEC 61000-4-2 (ESD), Level 4

IEC 61000-4-4 (EFT), Level 4

IEC 61000-4-5 (Surge), Level 4

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

See the newest products certification information on  
3onedata website