



## IES618 Series

DIN-Rail or Wall Mounting

8-port 100M Layer 2 Managed Industrial Ethernet Switch

- Support 4 100M Ethernet copper ports and 4 100M Ethernet ports (optional fiber/copper ports)
- Adopt Ring patent technology, support single ring, coupling ring, chain ring, and Dual-homing ring network functions, with automatic recovery time of network failure  $\leq 50\text{ms}$
- Support 12~60VDC redundant dual power supply input and nonpolarity
- Support 220VAC/DC power supply input
- Support  $-40\sim 75^{\circ}\text{C}$  wide operating temperature range



RPS

## Introduction

IES618 series are layer 2 managed industrial Ethernet switches. This series provides 6 types of products and support different combination schemes of copper port and fiber port, which can meet the requirements of different application scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, ERPS, 802.1Q VLAN, QoS Function, Port Trunking, Port Mirroring, LLDP, 802.1X. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SNMP and other access methods. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

DIP switch can achieve restoring factory defaults. When DC power supply or port has link failure, ALM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, rail transit, smart city, safety city, new energy, intelligent manufacturing and other industrial fields.

## Features and Benefits

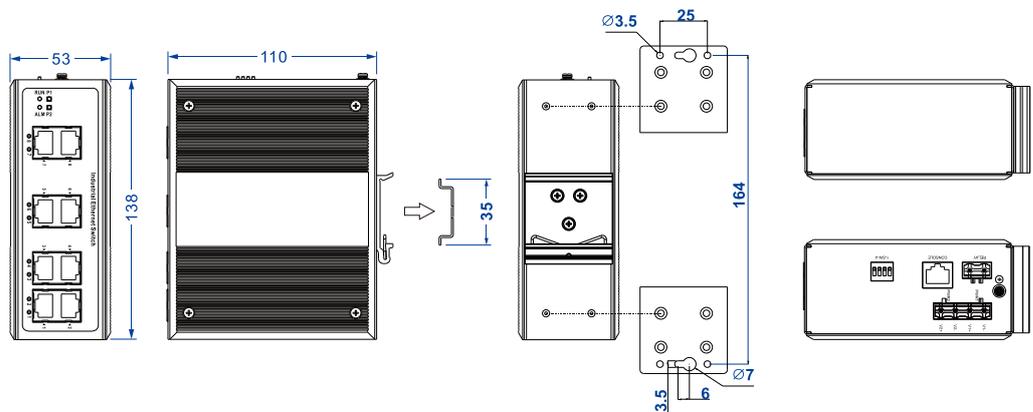
- ④ SNMPv1/v2c is used for network management of various levels
- ④ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ④ QoS supports real-time traffic classification and priority setting
- ④ File management is convenient for the device rapid configuration and online upgrading
- ④ Port statistics can be used for the port real time traffic statistics
- ④ User password can conduct user hierarchical management to improve the device management security
- ④ Relay alarm is convenient for troubleshooting of construction site
- ④ Storm suppression can restrain broadcast, unknown multicast and unicast
- ④ VLAN is used for simplifying network planning
- ④ Port Trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ④ Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- ④ IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- ④ SW-Ring, ERPS and STP/RSTP can achieve network redundancy, preventing network storm
- ④ LLDP can achieve automatic topology discovery, which is convenient for visual

- management
- 802.1X authentication could strength the flexibility and security of network
- Loop protection could efficiently eliminate the influence caused by port loopback by detecting the existence of port loopback
- Support port and power connection exception alarm, port rate, CPU and memory utilization rate threshold alarm

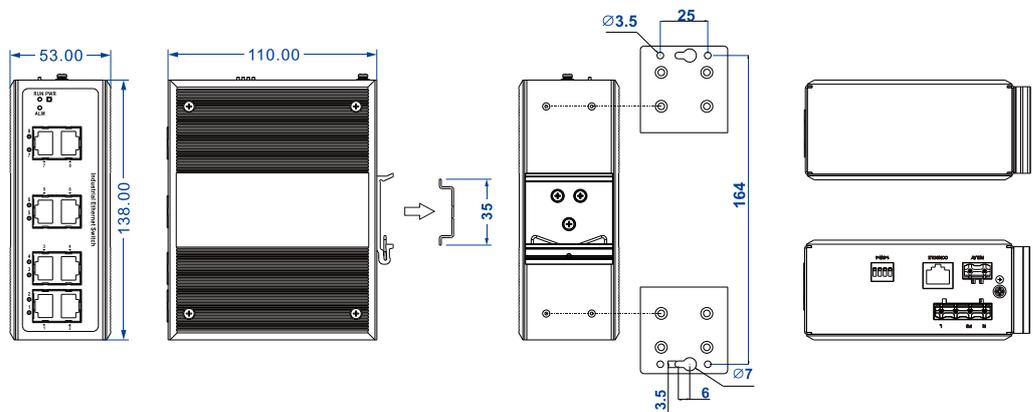
## Dimension

Unit: mm

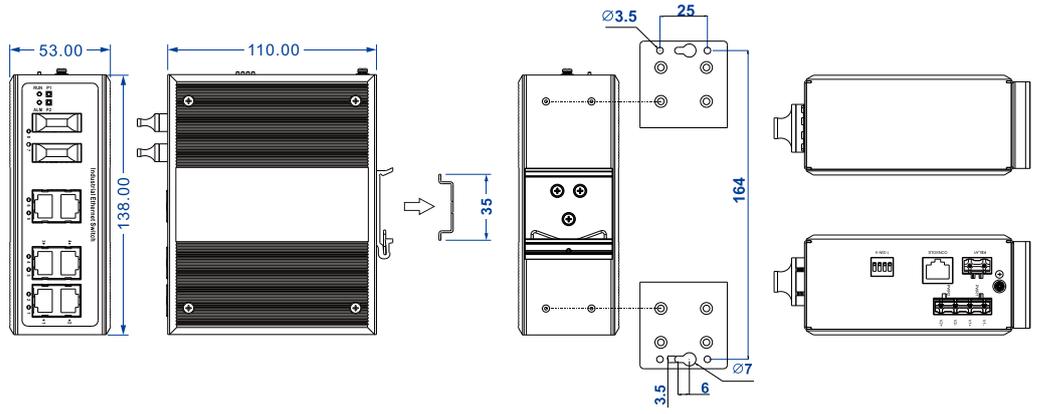
- IES618-2P48



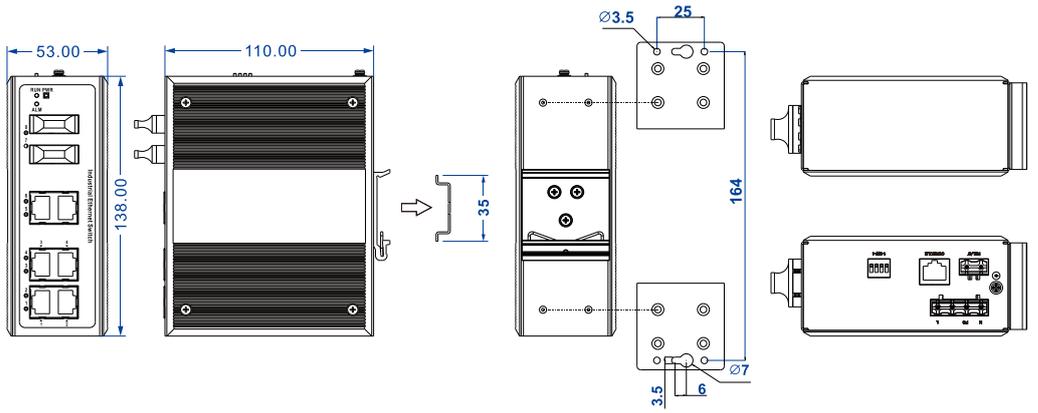
- IES618-P220



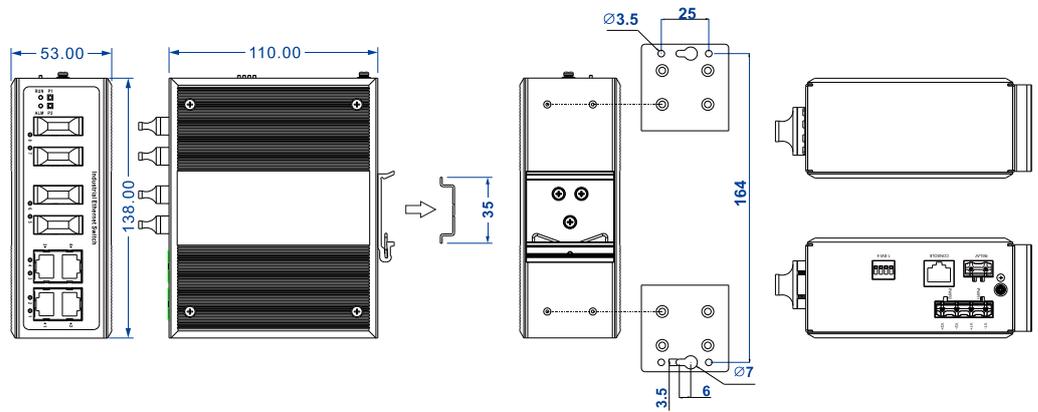
- IES618-2F-2P48



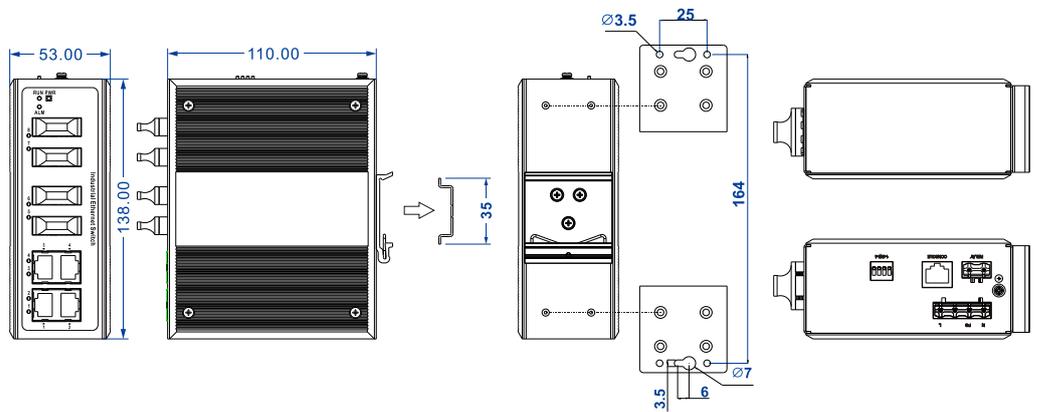
● IES618-2F-P220



● IES618-4F-2P48



● IES618-4F-P220



## Specification

Standard & Protocol	<p>IEEE 802.3 for 10Base-T                  IEEE 802.3u for 100Base-TX and 100Base-FX                  IEEE 802.3x for Flow Control                  IEEE 802.1D-2004 for Spanning Tree Protocol                  IEEE 802.1w for Rapid Spanning Tree Protocol                  IEEE 802.1Q for VLAN                  IEEE 802.1p for CoS                  IEEE 802.1AB for LLDP                  IEEE 802.1X for 802.1X Authentication                  ITU-T G.8032 for ERPS</p>
Management	<p>Console/Telnet/WEB management method, SNMP v1/v2c                  Centralized Management of Equipment, Port Mirroring, QoS, LLDP,                  File Management, Port Statistics</p>
Security	<p>User privilege classification, Relay Alarm (Port Alarm and Power Alarm), IEEE802.1X, Threshold Alarm, Loop Protection</p>
Switch Function	<p>802.1Q VLAN, Static Port Aggregation, Bandwidth Management, Flow Control</p>
Unicast / Multicast	<p>IGMP Snooping</p>
Redundancy Technology	<p>SW-Ring, ERPS, STP/RSTP</p>
Interface	<p>Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/ MDI-X Autotuning                  Fiber port: 100Base-FX, optional SC/ST/FC                  Console port: CLI command line management port (RS-232), RJ45                  Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current load capability is 1A@24VDC or 0.5A@120VAC</p>
Indicator	<p>Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator</p>
Switch Property	<p>Transmission mode: store and forward                  MAC address: 16K                  Buffer: 4Mbit                  Backplane bandwidth: 5.6G                  Switch time delay: &lt;10μs</p>

Power Supply

DC power: 12/24/48VDC (12~60VDC), redundant dual power input, built-in overcurrent protection, support non-polarity  
 AC power: 220 VAC/DC (85 ~ 264 VAC/DC), with built-in overcurrent protection

Power Consumption	Available Models	No-load	Full-load
	IES618-2P48	2.1W@48VDC	2.8W@48VDC
IES618-P220	2.6W@220VAC	3.3W@220VAC	
IES618-2F-2P48	4.5W@48VDC	5.2W@48VDC	
IES618-2F-P220	4.5W@220VAC	5.1W@220VAC	
IES618-4F-2P48	5.7W@48VDC	6.1W@48VDC	
IES618-4F-P220	5.7W@220VAC	6.2W@220VAC	

Working Environment

Operating temperature: -40~75°C  
 Storage temperature:-40~85°C  
 Relative humidity: 0%~95% (no condensation)

Physical Characteristic

Housing: IP40 protection, high-strength corrugated metal  
 Installation: DIN-Rail or wall mounting  
 Dimension (W x H x D): 53mm×138mm×110mm  
 Weight: 670g

Industrial Standard of AC Product

- IEC 61000-4-2 (ESD), Level 3
  - Air discharge: ±8kV
  - Contact discharge: ±6kV
- IEC 61000-4-4 (EFT), Level3
  - Power supply: ±2kV
  - Ethernet port: ±1kV
  - Relay: ±2kV
- IEC 61000-4-5 (Surge), Level 3
  - Power supply: common mode±2kV, differential mode±1kV
  - Ethernet port: common mode±2kV, differential mode±1kV
  - Relay: common mode ±2kV, differential mode±1kV
- Shock: IEC 60068-2-27
- Free fall: IEC 60068-2-32
- Vibration: IEC 60068-2-6

Industrial Standard of DC Product

- IEC 61000-4-2 (ESD), Level 4
  - Air discharge: ± 15kV
  - Contact discharge: ±8kV

IEC 61000-4-4 (EFT), Level4

- Power supply:  $\pm 4\text{kV}$
- Ethernet port:  $\pm 2\text{kV}$
- Relay:  $\pm 4\text{kV}$

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

- Power supply: common mode  $\pm 4\text{kV}$ , differential mode  $\pm 2\text{kV}$
- Ethernet port: common mode  $\pm 4\text{kV}$ , differential mode  $\pm 2\text{kV}$
- Relay: common mode  $\pm 4\text{kV}$ , differential mode  $\pm 2\text{kV}$

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Authentication

CE, FCC, RoHS, UL62368

Warranty

5 years

## Ordering Information

Available Models	100M Fiber Port	100M Copper Port	Power Supply
IES618-2P48	—	8	12/24/48VDC (12~60VDC) dual power supply
IES618-P220	—	8	220VAC/DC (85~264VAC/DC)
IES618-2F-2P48	2	6	12/24/48VDC (12~60VDC) dual power supply
IES618-2F-P220	2	6	220VAC/DC (85~264VAC/DC)
IES618-4F-2P48	4	4	12/24/48VDC (12~60VDC) dual power supply
IES618-4F-P220	4	4	220VAC/DC (85~264VAC/DC)



Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China

TEL.: +86-755-26702668 ext 835

FAX: +86-755-26703485

E-mail: [ics@3onedata.com](mailto:ics@3onedata.com)

Website: [www.3onedata.com](http://www.3onedata.com)

◀ [Please scan our QR code for more details](#)

\*Product pictures and technical data in this datasheet are only for reference. Updates are subject to change without prior notice. The final interpretation right is reserved by 3onedata.