



## IES318 Series

DIN-Rail or Wall Mounting

8-port 100M Layer 2 Unmanaged Industrial Ethernet Switch

- Support 4 100M Ethernet copper ports and 4 100M Ethernet ports (optional fiber/copper ports)
- Support relay alarm output
- Support DC 12/24/48VDC (9~60VDC) dual power input and power supply nonpolarity
- Support AC 220VAC/DC (85~264VAC/DC) power supply input
- Support -40~75°C wide temperature operation



Industrial Grade

Fanless Desig

RPS

# Introduction

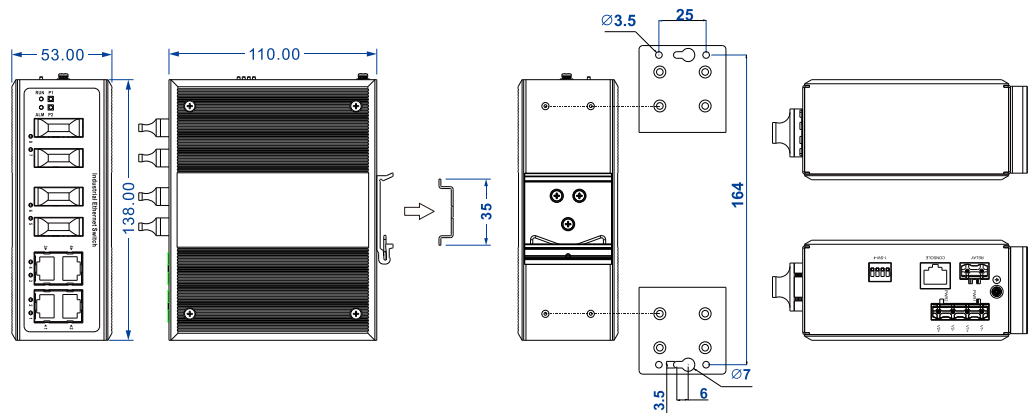
IES318 series is an 8-port 100M layer 2 unmanaged industrial Ethernet switch. This series provides 8 products and supports 100M copper ports and 100M fiber ports. They adopt wall or DIN-Rail mounting to meet the requirements of different application scenes.

DC power supply input consists of two independent power supply circuits, which can ensure device's normal operation when one fails. The design of DIP switch can realize port alarm and power alarm. When power supply or port has link failure, ALARM 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.

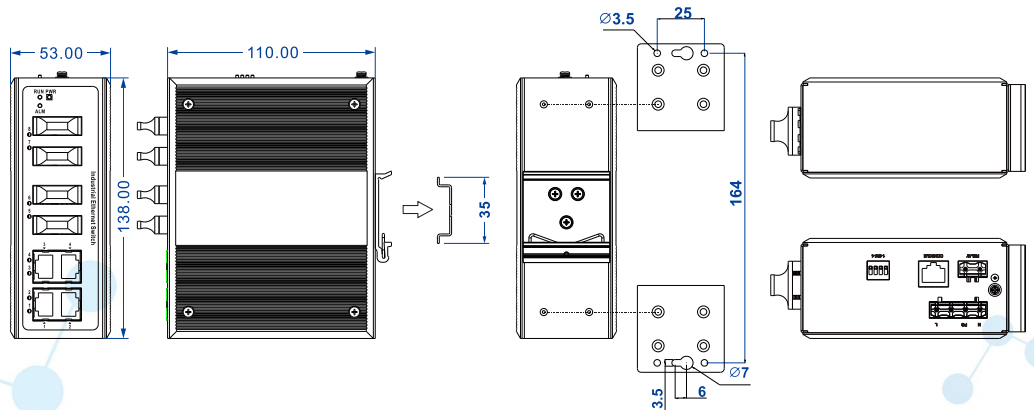
# Dimension

Unit: mm

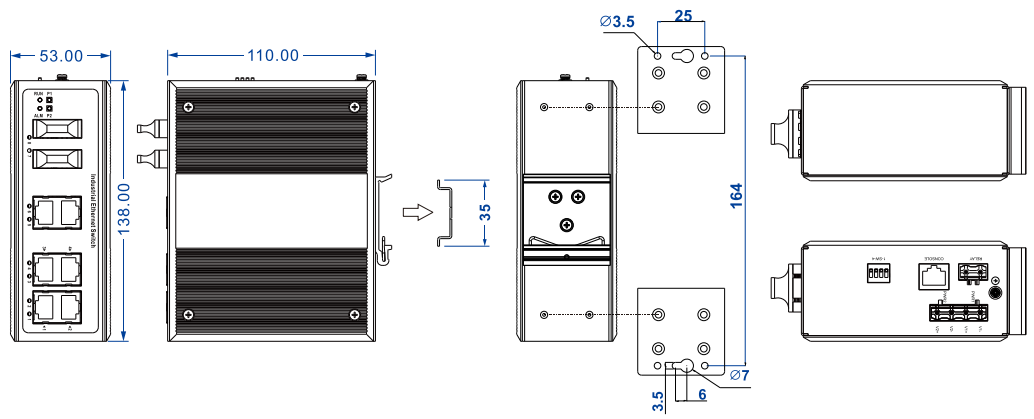
- IES318-4T4F-2P48



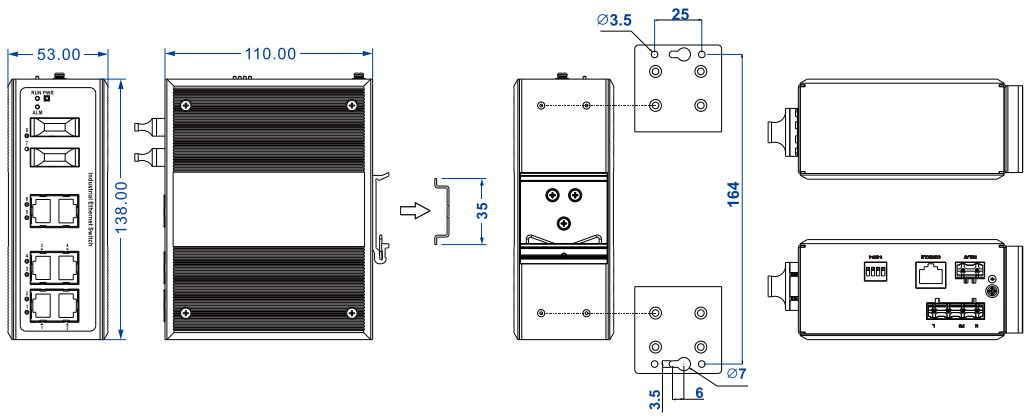
- IES318-4T4F-P220



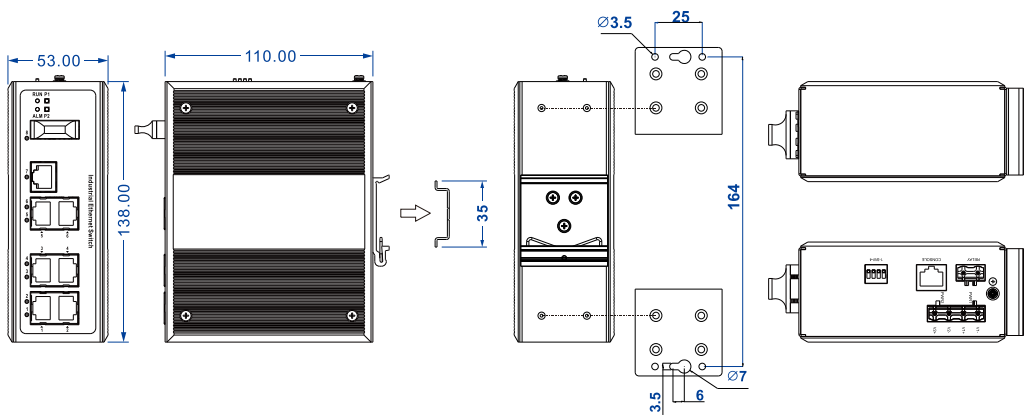
- IES318-6T2F-2P48



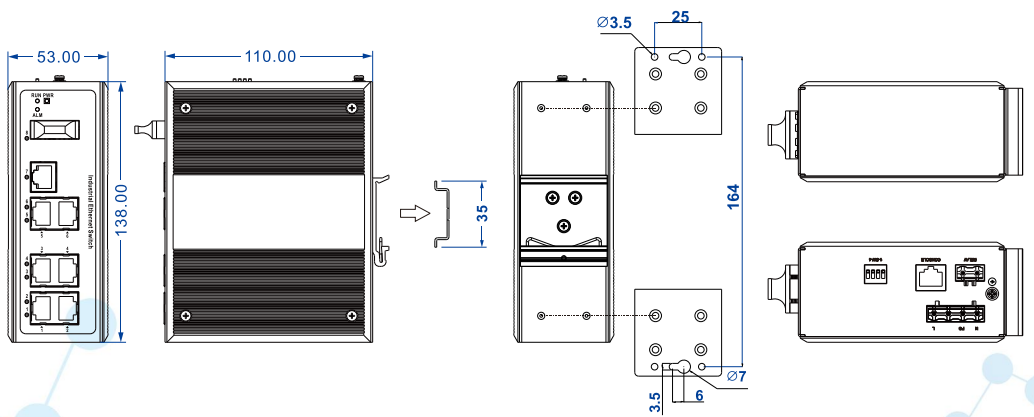
● IES318-6T2F-P220



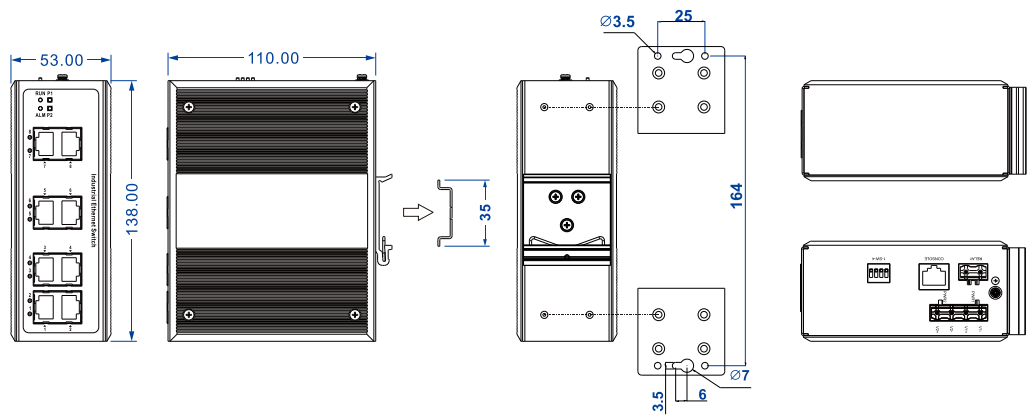
● IES318-7T1F-2P48



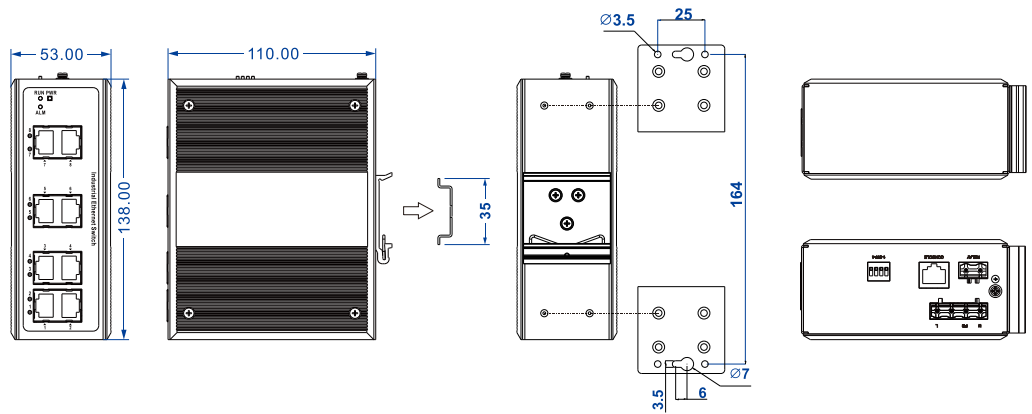
● IES318-7T1F-P220



● IES318-8T-2P48



● IES318-8T-P220



## Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-X
Interface	Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode Self-Adaption, MDI/ MDI-X Autotuning Fiber port: 100Base-X, optional SC/ST/FC Alarm port: 2-pin 7.62mm pitch terminal blocks, supports 1 relay alarm output, and the current load capacity is 1A@24VDC or 0.5A@120VAC
Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator
Switching Property	Transmission mode: store and forward MAC address: 2K Buffer: 1Mbit Backplane bandwidth: 1.6G Switch time delay: <10μs

### Power Supply

- DC power: 12/24/48VDC (9~60VDC), with dual power supplies, built-in overcurrent protection, supports nonpolarity
- AC power: 220 VAC/DC (85~264VAC/DC), with built-in overcurrent protection

### Power Consumption

Model	No-load	Full-load
IES318-4T4F-2P48	3.8W@48VDC	4.3W@48VDC
IES318-4T4F-P220	4.2W@220.6VAC	4.7W@221VAC
IES318-6T2F-2P48	2.2W@48VDC	3.0W@48VDC
IES318-6T2F-P220	2.6W@220.4VAC	3.3W@220VAC
IES318-7T1F-2P48	0.9W@48VDC	1.9W@48VDC
IES318-7T1F-P220	2.1W@220VAC	2.8W@220VAC
IES318-8T-2P48	0.9W@48VDC	1.9W@48VDC
IES318-8T-P220	1.2W@220VAC	2.0W@220VAC

### Working Environment

Operating temperature: -40~75°C  
Storage temperature: -40~85°C  
Relative humidity: 5%~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 (AC); 627g (DC)

### AC Product Industrial Standard

IEC 61000-4-2 (ESD), Level 3

- Air discharge: ±8kV
- Contact discharge: ±6kV

IEC 61000-4-4 (EFT), Level 3

- 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

### DC Product Industrial Standard

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

Warranty

5 years

## Ordering Information

Model	100M Copper Port	100M Fiber Port	Power Supply
IES318-4T4F-2P48-N	4	4	12/24/48VDC (9~60VDC) dual power supply
IES318-4T4F-P220-N	4	4	220VAC/DC (85~264VAC/DC)
IES318-6T2F-2P48-N	6	2	12/24/48VDC (9~60VDC) dual power supply
IES318-6T2F-P220-N	6	2	220VAC/DC (85~264VAC/DC)
IES318-7T1F-2P48-N	7	1	12/24/48VDC (9~60VDC) dual power supply
IES318-7T1F-P220-N	7	1	220VAC/DC (85~264VAC/DC)
IES318-8T-2P48-N	8	—	12/24/48VDC (9~60VDC) dual power supply
IES318-8T-P220-N	8	—	220VAC/DC (85~264VAC/DC)