



## IES7110 Series

DIN-Rail or Wall Mounting

10-Port 100M/Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 2 Gigabit fiber ports (SFP slot) and 8 optional 100M Ethernet fiber/copper ports
- Adopt Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 50ms
- Gigabit bandwidth can realize transmitting large amounts of video, voice and data with high performance and high speed
- DC Product supports dual power input, with input voltage of 12/24/48VDC (12~60VDC).
- AC Product supports input voltage of 100~240VAC/DC
- Support -40~75°C wide operating temperature range



Industrial Grade  
RPS



# Introduction

IES7110 series are 10-port 100M/Gigabit layer 2 managed industrial Ethernet switches. This series provides 6 products and supports a variety of interfaces including 100M copper ports, 100M fiber ports, and Gigabit SFP slots. They adopt DIN-Rail mounting or wall mounting to meet the requirements of different application scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS Function, LLDP, IGMP Snooping, Dynamic Multicast, Port Trunking, Port Mirroring, 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.

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 could implement device factory setting recovery. When DC 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.

## Features and Benefits

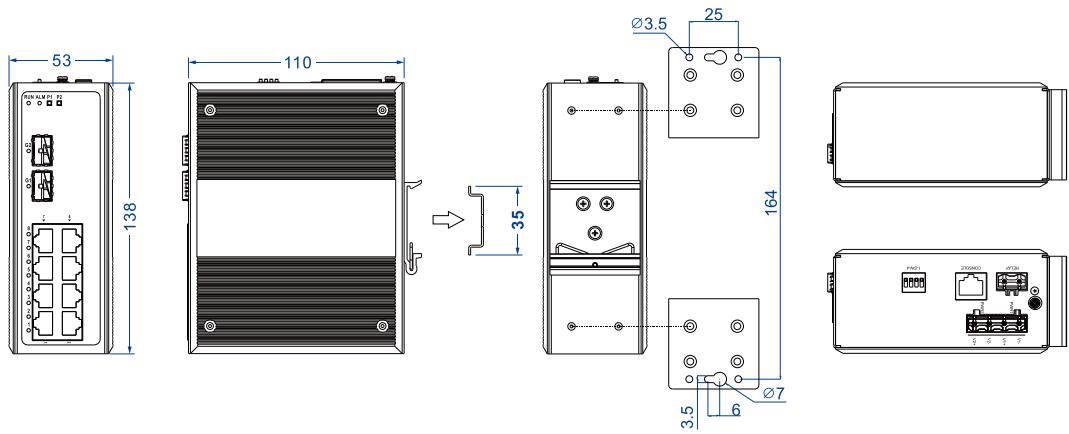
- SNMPv1/v2c/v3 is used for network management of various levels
- Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- QoS supports real-time traffic classification and priority setting
- LLDP can achieve automatic topology discovery, which is convenient for visual management
- File management is convenient for rapid configuration and online upgrading of the device
- Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- Port statistics can be used for the port real time traffic statistics
- User password can conduct user hierarchical management to improve the device management security
- Relay alarm is convenient for troubleshooting of construction site
- Storm suppression can restrain broadcast, unknown multicast and unicast
- VLAN is used for simplifying network planning

- Port trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- IGMP Snooping and Dynamic multicast can be used for filtering multicast traffic to save the network bandwidth
- Ring and STP/RSTP can achieve network redundancy, preventing network storm
- 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

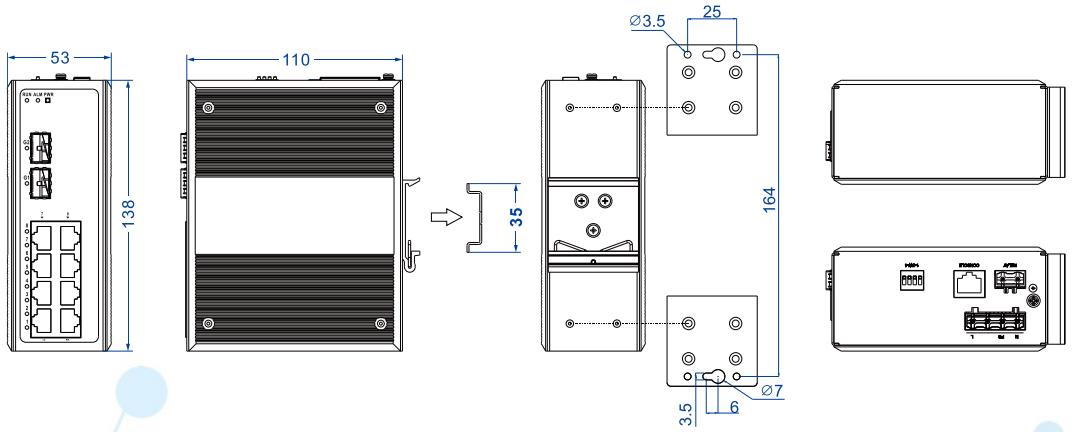
## Dimension

Unit: mm

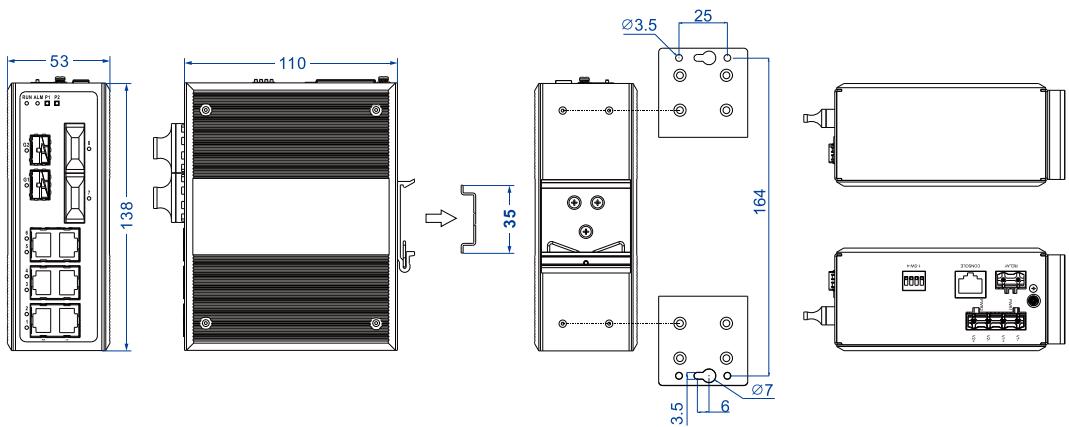
- IES7110-8T2GS-2P48



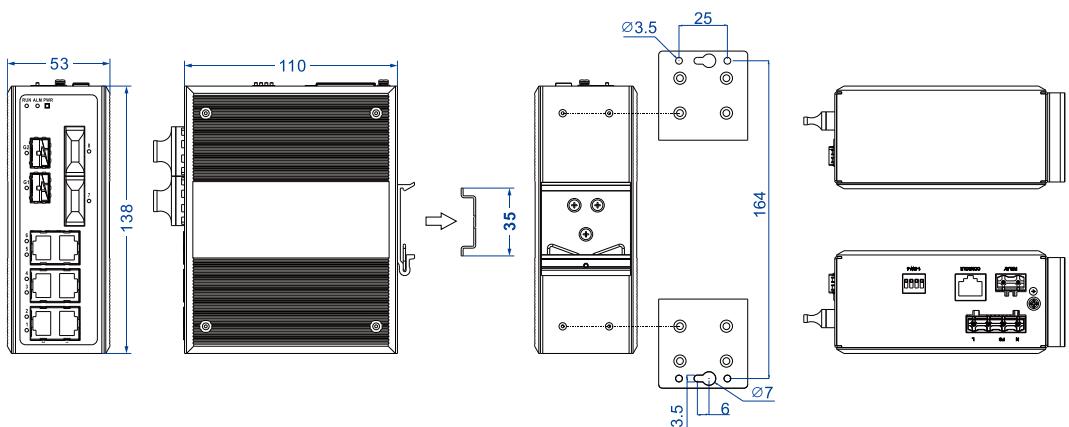
- IES7110-8T2GS-P220



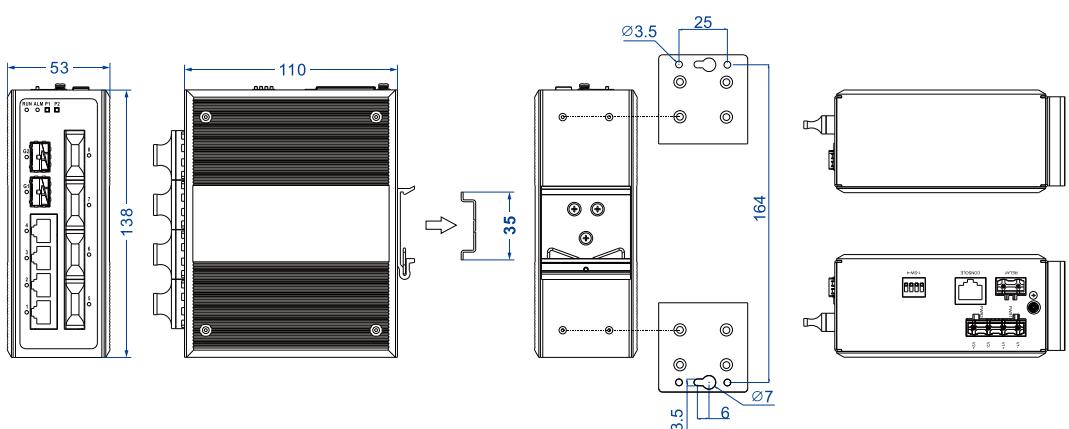
● IES7110-6T2F2GS-2P48



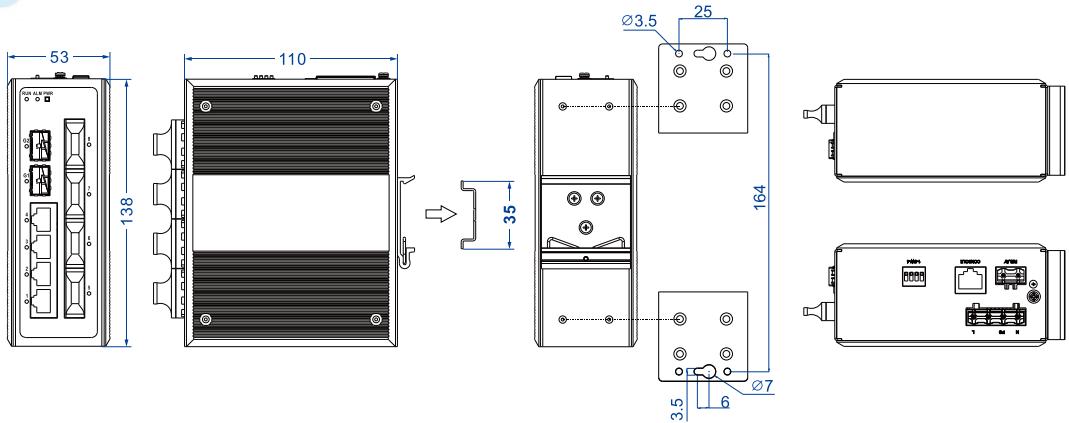
● IES7110-6T2F2GS-P220



● IES7110-4T4F2GS-2P48



IES7110-4T4F2GS-P220



## Specification

<b>Standard &amp; Protocol</b>	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow Control IEEE 802.1D 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
<b>Management</b>	SNMP v1/v2c/v3 Centralized Management of Equipment, Port Mirroring, QoS, LLDP, DHCP Client, File Management, Port Statistics
<b>Security</b>	Classification of User Permissions, Port Alarm, Power Alarm, IEEE802.1X, Threshold Alarm, Loop Protection
<b>Switch Function</b>	802.1Q VLAN, Static Port Aggregation, Bandwidth Management, Flow Control
<b>Unicast / Multicast</b>	Dynamic MAC Multicast, IGMP-Snooping
<b>Redundancy Technology</b>	Ring, STP/RSTP
<b>Interface</b>	100M copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning

	<p>100M fiber port: 100Base-FX, optional SC/ST/FC SFP slot: 1000Base-X SFP Console port: CLI command line management port (RS-232), RJ45 Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output</p>																					
Indicator	<p>Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator</p>																					
Switch Property	<p>Transmission mode: store and forward MAC address: 4K Cache: 2Mbit Backplane bandwidth: 9.6G Switch time delay: &lt;10µs</p>																					
Power Supply	<p>DC power: 12/24/48VDC (12~60VDC), adopt 4-pin 7.62mm pitch terminal blocks, redundant dual power input, built-in overcurrent protection, support non-polarity AC power: 100~240 VAC/DC, with built-in 5.0A overcurrent protection</p>																					
Power Consumption	<table border="1" data-bbox="701 1145 1448 1437"> <thead> <tr> <th>Model</th><th>No-load</th><th>Full-load</th></tr> </thead> <tbody> <tr> <td>IES7110-8T2GS-2P48</td><td>3.8W@48VDC</td><td>4.0W@48VDC</td></tr> <tr> <td>IES7110-8T2GS-P220</td><td>4.1W@220VAC</td><td>4.3W@220VAC</td></tr> <tr> <td>IES7110-4T4F2GS-2P48</td><td>7.0W@48VDC</td><td>8.6W@48VDC</td></tr> <tr> <td>IES7110-4T4F2GS-P220</td><td>6.8W@220VAC</td><td>8.0W@220VAC</td></tr> <tr> <td>IES7110-6T2F2GS-2P48</td><td>5.6W@48VDC</td><td>7.8W@48VDC</td></tr> <tr> <td>IES7110-6T2F2GS-P220</td><td>5.4W@220VAC</td><td>6.8W@220VAC</td></tr> </tbody> </table>	Model	No-load	Full-load	IES7110-8T2GS-2P48	3.8W@48VDC	4.0W@48VDC	IES7110-8T2GS-P220	4.1W@220VAC	4.3W@220VAC	IES7110-4T4F2GS-2P48	7.0W@48VDC	8.6W@48VDC	IES7110-4T4F2GS-P220	6.8W@220VAC	8.0W@220VAC	IES7110-6T2F2GS-2P48	5.6W@48VDC	7.8W@48VDC	IES7110-6T2F2GS-P220	5.4W@220VAC	6.8W@220VAC
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Working Environment	<p>Operating temperature: -40~75°C Storage temperature: -40~85°C Relative humidity: 5%~95% (no condensation)</p>																					
Mechanical Structure	<p>Housing: IP40 protection, metal Installation: DIN-Rail or wall mounting Dimension (W x H x D): 53mm×138mm×110mm Weight: 641g</p>																					

#### DC Product Industrial Standard

IEC 61000-4-2 (ESD, electronic static discharge), Level 4

- Air discharge: ±15kV
- Contact discharge: ±8kV



IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 4

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

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  $\pm 2\text{kV}$

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

<b>AC Product</b> <b>Industrial Standard</b>	<p>IEC 61000-4-2 (ESD, electrostatic discharge), Level 3</p> <ul style="list-style-type: none"><li>• Air discharge: <math>\pm 8\text{kV}</math></li><li>• Contact discharge: <math>\pm 6\text{kV}</math></li></ul> <p>IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3</p> <ul style="list-style-type: none"><li>• Power supply: <math>\pm 2\text{kV}</math></li><li>• Ethernet port: <math>\pm 1\text{kV}</math></li></ul> <p>IEC 61000-4-5 (Surge), Level 3</p> <ul style="list-style-type: none"><li>• Power supply: common mode <math>\pm 2\text{kV}</math>, differential mode <math>\pm 1\text{kV}</math></li><li>• Ethernet port: common mode <math>\pm 2\text{kV}</math>, differential mode <math>\pm 1\text{kV}</math></li></ul> <p>Shock: IEC 60068-2-27</p> <p>Free fall: IEC 60068-2-32</p> <p>Vibration: IEC 60068-2-6</p>
<b>Authentication</b>	CE, FCC, RoHS
<b>Warranty</b>	5 years



# Ordering Information

Available Models	Gigabit SFP Slot	100M Copper Port	100M Fiber Port	Power Supply
IES7110-8T2GS-2P48	2	8	—	
IES7110-6T2F2GS-2P48	2	6	2	12/24/48VDC (12~60VDC) dual power supply
IES7110-4T4F2GS-2P48	2	4	4	
IES7110-8T2GS-P220	2	8	—	
IES7110-6T2F2GS-P220	2	6	2	100~240VAC/DC
IES7110-4T4F2GS-P220	2	4	4	



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