3onedata
Reliable Connections



IES6100 Series

DIN-Rail or Wall Mounting

9-port 100M Layer 2 Managed Industrial Ethernet Switch

- Support 6 100M Ethernet copper ports and 3 100M Ethernet fiber ports
- Adopt Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 50ms
- Support 12/24/48VDC (9~60VDC), power supply redundancy, support anti-reverse connection
- Support 220VAC/DC (85~264VAC/DC) power supply input and nonpolarity
- Support -40~75℃ wide operating temperature range

Industrial Grade RPS

CONNECTING FOR A BETTER FUTURE

3onedata Co.,Ltd.

Introduction

IES6100 series are layer 2 managed industrial Ethernet switches. This series provide 2 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, 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 rail transit, smart city, safety city, new energy, intelligent manufacturing and other industrial fields.

Features and Benefits

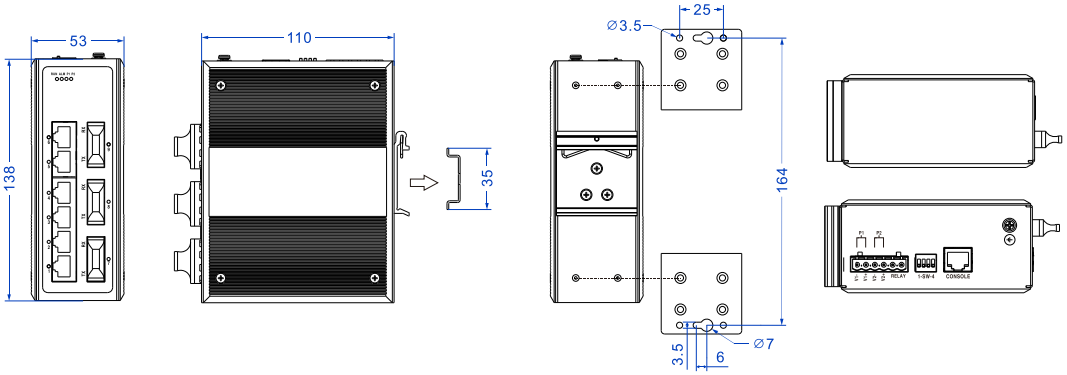
- SNMPv1/v2c/v3 is used for network management of various levels
- Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- QoS supports real-time traffic classification and priority setting
- File management is convenient for the device rapid configuration and online upgrade
- 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
- Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- Ring and STP/RSTP can achieve network redundancy, preventing network storm
- 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

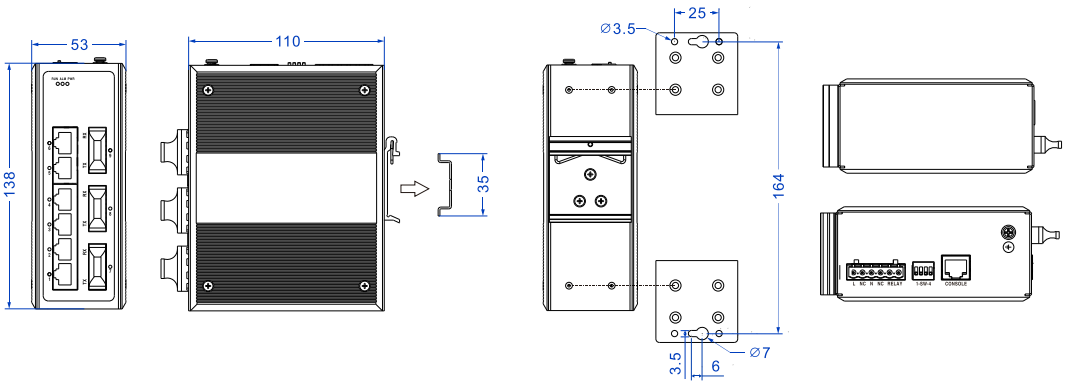
Dimension

Unit: mm

- IES6100-6T3F-2LV



- IES6100-6T3F-HV



Specification

Standard & Protocol	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

Management	Console/Telnet/WEB management method, SNMP v1/v2c/v3 Centralized Management of Equipment, Port Mirroring, QoS, LLDP, File Management, Port Statistics
Security	User privilege classification, Relay Alarm (Port Alarm and Power Alarm), IEEE802.1X, Threshold Alarm, Loop Protection
Switch Function	802.1Q VLAN, Static Port Aggregation, Bandwidth Management, Flow Control
Unicast / Multicast	IGMP snooping
Redundancy Technology	Ring, STP/RSTP
Interface	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: 6-pin 5.08mm pitch terminal blocks, relay occupies the right 2 pins, supporting 1 relay alarm output, the current load capacity is 1A@24VDC or 0.5A/120VAC
Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator
Switch Property	Transmission mode: store and forward MAC address: 4K Cache: 2Mbit Backplane bandwidth: 9.6Gbps Switch time delay: <10μs
Power Supply	DC power supply: ● Power supply input: 12/24/48VDC (9~60VDC) ● Connection method: 6-pin 5.08mm pitch terminal blocks (including 4-pin power supply) ● Power supply quantity: dual power supply redundancy input ● Connection protection: built-in overcurrent protection, support anti-reverse connection AC power supply: ● Power supply input: 220VAC/DC (85~264VAC/DC). ● Connection method: 6-pin 5.08mm pitch terminal blocks (includes 2-pin power supply) ● Number of power supply: single power supply input

	● Connection protection: built-in overcurrent protection, support non-polarity
Power Consumption	IES6100-6T3F-2LV： ● No-load at normal temperature 25℃: 5.1W@48VDC ● Full-load at normal temperature 25℃: 5.2W@48VDC ● No-load at high temperature 75℃: 5.5W@48VDC ● Full-load at high temperature 75℃: 5.6W@48VDC IES6100-6T3F-HV ● No-load at normal temperature 25℃: 4.58W@220VAC ● Full-load at normal temperature 25℃: 4.77W@220VAC ● No-load at high temperature 75℃: 4.83W@220VAC ● Full-load at high temperature 75℃: 5.05W@220VAC
Working Environment	Operating temperature: -40~75℃ Storage temperature: -40~85℃ Relative humidity: 0%~95% (no condensation)
Mechanical Structure	Housing: IP40 protection, high-strength corrugated metal Installation: DIN-Rail or wall mounting Dimension (W x H x D): 53mm×138mm×110mm Weight: IES6100-6T3F-2LV：0.625kg IES6100-6T3F-HV：0.659kg
Industrial Standard	IEC 61000-4-2 (ESD), Level 4 ● Air discharge: ± 15kV ● Contact discharge: ±8kV IEC 61000-4-4 (EFT)，Level 4 ● Power supply: ±4kV ● Ethernet interface: ±2kV ● Relay: ±2kV IEC 61000-4-5 (Surge)，Level 4 ● Power supply: common mode ±4kV, differential mode ±2kV ● Ethernet port: common mode ±4kV, differential mode ±2kV ● Relay: common mode ±4kV, differential mode ±2kV Shock: IEC 60068-2-27 Free fall: IEC 60068-2-31 Vibration: IEC 60068-2-6

Authentication	CE, FCC, RoHS
Warranty	5 years

Ordering Information

Model	100M Fiber Port	100M Copper Port	Power Supply
IES6100-6T3F-2LV	3	6	12/24/48VDC (9~60VDC) redundant power supply
IES6100-6T3F-HV	3	6	220VAC/DC (85~264VAC/DC)

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