3onedata
Make network communication more reliable

IES6312 Series

DIN-Rail or Wall Mounting

12-port Full Gigabit Layer 2 Managed Industrial PoE/non-PoE Ethernet Switch

- Support 4 gigabit fiber ports (1*9 module or SFP slot) and 8 gigabit copper ports (PoE or non-PoE)

- Output power of single-port PoE can reach up to 30W

- Adopt SW-Ring patent technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms

- PoE product supports dual power supply, 48VDC PoE or 24VDC PoE power input

- Non-PoE product supports 100~240VAC or dual power supply 12~48VDC power input

- Support -40~75℃ wide operating temperature range

CE | FCC | RoHS | UL LISTED | SW-Ring | <20ms RECOVERY | Industrial Grade | PoE

Introduction

IES6312 series are 12-port full gigabit layer 2 managed industrial PoE/non-PoE Ethernet switches. Their PoE power supply conforms to the protocol standards of IEEE 802.3af/at. This series have 8 types of product, and provide gigabit copper ports, gigabit PoE ports, gigabit fiber pots, gigabit SFP slots and other ports. They support multiple power supply schemes including 100~240VAC, 12~48VDC, 24VDC POE and 48VDC POE, and adopt DIN-Rail mounting or wall mounting, which can meet the requirements of different scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, LLDP, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, 802.1X Authentication, Network Diagnosis, Rapid Configuration, Online Upgrading and so on. Moreover, it supports CLI, WEB, Telnet, SNMP and other access modes. It can provide users with good experience via friendly design of network management system interface, simple and convenient operation.

The input DC power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. DIP switch can restore 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 AP coverage, railway transportation, smart city, safe city, new energy, smart grid, aerospace, intelligent manufacturing, military project and other industrial fields.
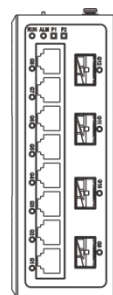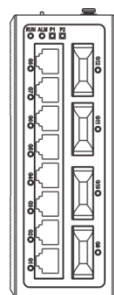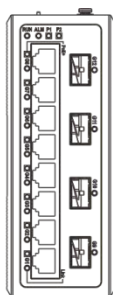
Features and Benefits

- ⊙ SNMPv1/v2c/v3 is used for network management of various levels
- ⊙ RMON can be used for efficient and flexible network monitoring
- ⊙ 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
- ⊙ DHCP server and DHCP client could be used for allocating IP address of different strategies
- ⊙ File management is convenient for rapid configuration and online upgrade of the device
- ⊙ Log management records boot information, operation information and connection information
- ⊙ Bandwidth management and flow control can reasonably distribute network bandwidth,
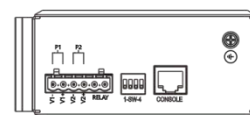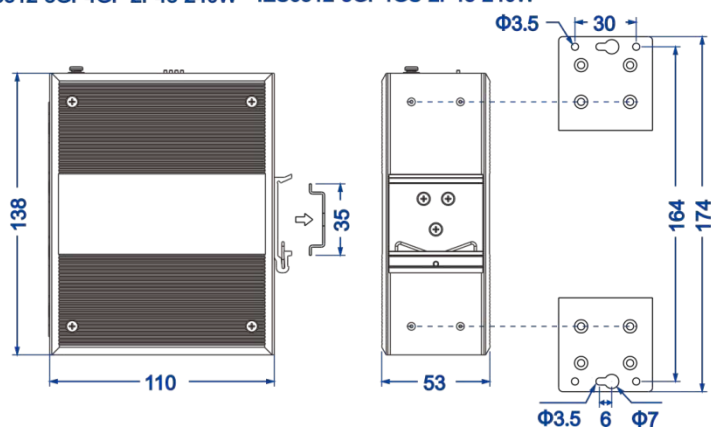
preventing unpredictable network status

⊙ Port statistics can be used for the port real time traffic statistics

⊙ Support Console/Telnet/WEB management

⊙ User password can conduct user hierarchical management to improve the device administrative security

⊙ Radius server authentication, anti-attack control, ACL and 802.1X authentication could strength the flexibility and security of network

⊙ Relay alarm is convenient for troubleshooting of construction site

⊙ Storm suppression can restrain broadcast, unknown multicast and unknown unicast

⊙ SSHD configuration could encrypt transmitted data, prevent DNS and IP spoofing

⊙ TELNET configuration and HTTPS configuration could ensure the access security of data

⊙ VLAN can simplify the network planning

⊙ Port trunking and LACP can increase network bandwidth and the reliability of network connection to achieve optimal bandwidth utilization

⊙ IGMP-snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth

⊙ Port isolation could achieve port isolation in the same VLAN and save VLAN resources

⊙ SW-Ring, STP/RSTP and ERPS can achieve network redundancy, preventing network storm

⊙ Ping, Traceroute and Port Loopback could achieve network diagnosis and troubleshooting

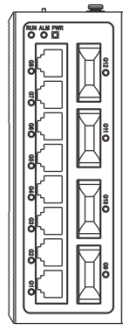⊙ PoE could power device over Ethernet, thus decreasing the cable connection of powered devices

Dimension

Unit:mm

- DC power supply product

IES6312-8GP4GF-2P24-120W
IES6312-8GP4GF-2P48-120W
IES6312-8GP4GF-2P48-240W

IES6312-8GP4GS-2P24-120W
IES6312-8GP4GS-2P48-120W
IES6312-8GP4GS-2P48-240W

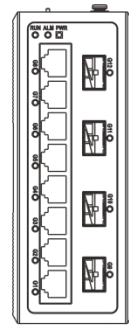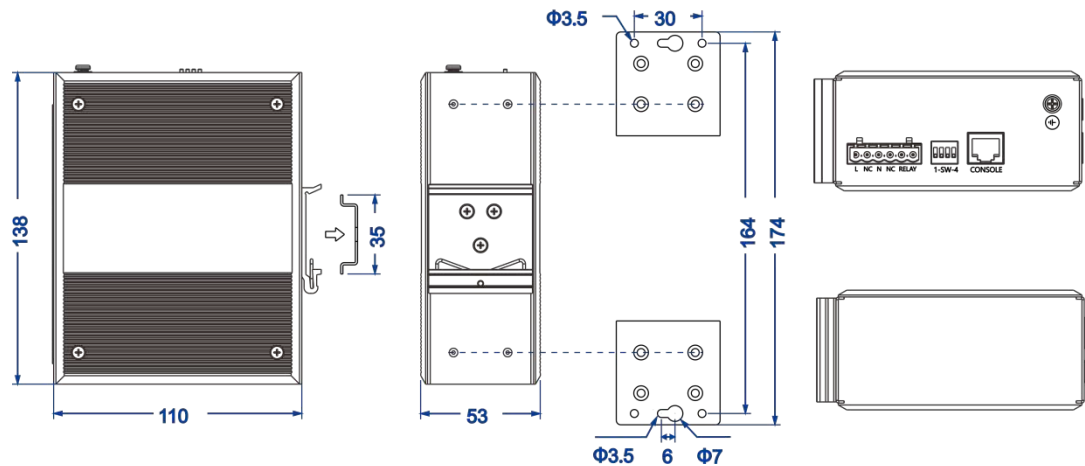**IES6312-8GT4GF-2P48**

IES6312-8GT4GS-2P48

- AC power supply product

IES6312-8GT4GF-P220   IES6312-8GT4GS-P220

Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol ITU-T G.8032 for ERPS IEEE 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.1X for 802.1X Authentication IEEE 802.1AB for LLDP IEEE 802.3ad for LACP IEEE 802.3af for PoE IEEE 802.3at for PoE+
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Client, File Management, Log Management, Port Statistics
Security	Classification of User Permissions, Radius server authentication, anti-attack control, ACL, 802.1X Authentication, Port Alarm, DC Power

	Supply Alarm, Storm Suppression, SSHD Configuration, Telnet Configuration, HTTPS Configuration
Switch Function	802.1Q Vlan, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control, Port Isolation
Unicast / Multicast	Static Multicast, GMRP, IGMP-Snooping
Redundancy Protocol	SW-Ring, STP/RSTP, ERPS
Troubleshooting	Ping, Traceroute, port loopback
Time Management	SNTP
PoE	The maximum power of POE port: 30W PoE power supply pin: V+, V+, V-, V- correspond to Pin 1, 2, 3, 6
Interface	Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning Gigabit fiber port: 1000Base-FX, optional SC/ST/FC interface SFP slot: 1000Base-SFP, LC Console port: CLI command line management port (RS-232), RJ45 Alarm port: 6-pin 5.08mm pitch terminal blocks(relay occupies 2 pins), support 1 relay alarm output, the current load capability is 1A@30VDC or 0.3A@125VAC
LED Indicator	Running Indicator, Alarm Indicator, Port Indicator, Power Supply Indicator, PoE Indicator
Switch Property	Transmission mode: store and forward MAC address: 8K Packet buffer size: 4Mbit Backplane bandwidth: 24G Switch time delay: <10μs
Power Requirement	This series of products provide 4 power supply modes. The PoE product has two optional power supply schemes: Scheme 1 ● Power supply range: 24VDC PoE ● Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins) ● Power supply quantity: dual power supply redundant backup ● Connection protection: anti-reverse connection

- Over-current protection: 12A

Scheme 2

- Power supply input: 48VDC PoE
- Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)
- Power supply quantity: dual power supply redundant backup
- Connection protection: anti-reverse connection
- Over-current protection: 5A

Non-PoE product has two optional power supply schemes:

Scheme 3

- Power supply range: 12~48VDC
- Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)
- Power supply quantity: dual power supply redundant backup
- Connection protection: non-polarity
- Over-current protection: 3A

Scheme 4

- Power supply input: 100~240VAC
- Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 2 pins)
- Over-current protection: 5A

	Model	No-load	Full-load
Power Consumption	IES6312-8GP4GF-2P24-120W	9.1W@24VDC	141.5W@24VDC
	IES6312-8GP4GS-2P24-120W	6.0W@24VDC	100.8W@24VDC
	IES6312-8GP4GF-2P48-120W、IES6312-8GP4GF-2P48-240W	8.8W@48VDC	130.0W@48VDC
	IES6312-8GP4GS-2P48-120W、IES6312-8GP4GS-2P48-240W	5.2W@48VDC	132.9W@48VDC
	IES6312-8GT4GF-2P48	7.5W@24VDC	10.5W@24VDC
	IES6312-8GT4GS-2P48	4.2W@24VDC	10.2W@24VDC
	IES6312-8GT4GF-P220	7.7W@220VAC	11.1W@220VAC
	IES6312-8GT4GS-P220	4.6W@220VAC	10.4W@220VAC

Environmental Limit

Operating temperature range: -40~75℃
Storage temperature range: -40~85℃
Relative humidity: 5% ~ 95% (no condensation)

Physical Characteristic

Housing: IP40 protection, metal
Installation: DIN-Rail or wall mounting
Weight: ≤740g

Dimension (W x H x D): 53mm×138mm×110mm

Industrial Standard	IEC 61000-4-2 (ESD), Level 3 IEC 61000-4-4 (EFT), Level 3 IEC 61000-4-5 (Surge), Level 3 Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Certification	CE, FCC, RoHS, UL61010
Warranty	5 years

Ordering Information

Available Models	Gigabit Copper Port	Gigabit PoE Port	Gigabit Fiber Port	Gigabit SFP Slot	PoE Power	Power Supply
IES6312-8GP4GF-2P24-120W	–	8	4	–	120W	Dual power supply 24VDC POE
IES6312-8GP4GS-2P24-120W	–	8	–	4	120W	
IES6312-8GP4GF-2P48-120W	–	8	4	–	120W	Dual power supply 48VDC POE
IES6312-8GP4GS-2P48-120W	–	8	–	4	120W	
IES6312-8GP4GF-2P48-240W	–	8	4	–	240W	Dual power supply 48VDC POE
IES6312-8GP4GS-2P48-240W	–	8	–	4	240W	
IES6312-8GT4GF-2P48	8	–	4	–	–	Dual power supply 12~48VDC
IES6312-8GT4GS-2P48	8	–	–	4	–	
IES6312-8GT4GF-P220	8	–	4	–	–	100~240VAC
IES6312-8GT4GS-P220	8	–	–	4	–	