IES618-4D Series

DIN-Rail Mounting

Layer 2 Managed Industrial Ethernet Switch with 4 Serial Ports

- Support 4 serial ports, 4 100M copper ports and 4 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
- Support more than 10 serial port work modes such as RealCom, TCP Client, TCP Server, UDP Server and UDP Client
- Support 12~48VDC dual power input and power supply nonpolarity
- Support -40~75℃ wide operating temperature range

Industrial Grade RPS

Introduction

IES618-4D series products are layer 2 managed industrial Ethernet switches with 4 serial ports. This series provides 3 products and supports 100M copper ports, 100M fiber ports, RS-485 and other kinds of interfaces to meet the requirements of different application scenes.

The network management system supports various network protocols and industry standards, and supports port configuration functions, such as port setting, link aggregation, port speed limit, storm suppression, port mirroring and port statistics. Support layer 2 configuration functions, such as VLAN configuration, MAC configuration, STP/RSTP, Ring, IGMP-Snooping, and port loop detection; Support network management functions, such as SNMP, LLDP, DHCP-Server, access control, QoS, Modbus TCP, etc. Support serial port server function, each serial port supports 4 TCP or UDP session connections, and supports TCP Server and other serial port working modes; Support system maintenance functions, such as network diagnosis, alarm configuration, software upgrade and log information; Support 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 one-key restoring factory defaults and product upgrade. 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.

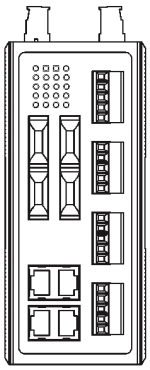
Features and Benefits

- SNMPv1/v2c 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

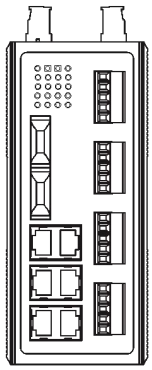
- Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring, ERPS and STP/RSTP can achieve network redundancy, preventing network storm
- 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 various alarms such as port, power supply, CPU utilization rate and memory utilization rate, which is convenient for troubleshooting on the construction site.
- Support multiple serial port work modes: RealCom Mode, Reverse RealCom Mode, TCP Server Mode, TCP Client Mode, UDP Server Mode, UDP Client Mode, UDP Rang Mode, Pair Slave Mode, Pair Master Mode, Telnet Mode, Reverse Telnet Mode, Disable Mode

Dimension

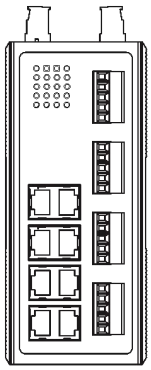
Unit: mm



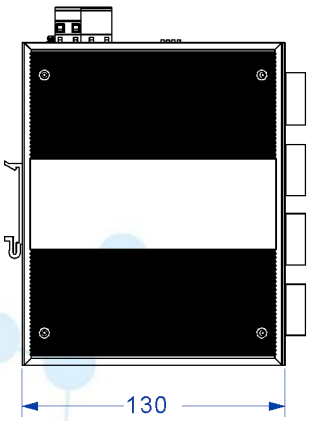
IES618-4F-4DI(RS-485)

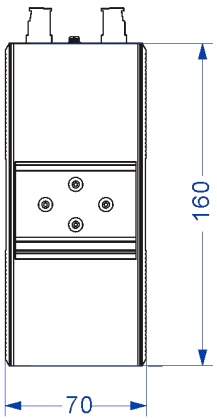


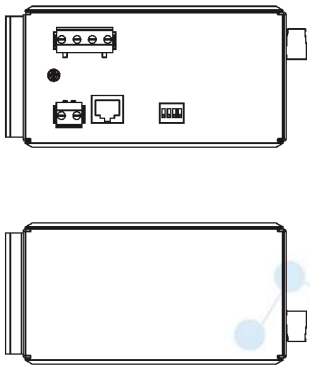
IES618-2F-4DI(RS-485)



IES618-4DI(RS-485)







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
Management	Console/Telnet/WEB management method, SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, File Management, Port Statistics, LLDP
Security	Classification of User Permissions, Port Alarm, Power Alarm, Threshold Alarm, Storm Suppression
Switch Function	802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control
Unicast / Multicast	IGMP snooping
Redundancy Technology	Ring, STP/RSTP
Serial Server Function	4 serial port servers, each serial port server supports 4 TCP or UDP session connections; Multiple working modes: TCP Server, TCP Client, UDP, TCP auto, Realcom, Advanced TCP Server and advanced UDP
Interface	Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/ MDI-X Autotunning 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, supporting 1 relay alarm output, the current load capacity is 1A@24VDC or 0.5A/120VAC
Serial Port	RS-485 signal: D+, D-, GND RS-422 signal: T+, T-, GND, R+, R- Baud rate: 600~921600bps Data bit: 7bit, 8bit Parity bit: None, Even, Odd Stop bit: 1bit, 2bit Interface form: 5-pin 5.08 mm pitch terminal blocks. Load capacity: support 32 points polling (customizable 64 points)

	Directional control: adopt automatic data direction control technology Interface protection: 2KV isolation voltage, 15KV electrostatic protection
Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator
Switch Property	Transmission mode: store and forward MAC address: 16K Cache: 4Mbit Backplane bandwidth: 5.6G Switch time delay: <10μs
Power Supply	12~48VDC, 4-pin 7.62mm pitch terminal blocks Support dual power supply redundancy and non-polarity Support built-in 4.0A overcurrent protection
Power Consumption	IES618-2F-4DI(RS-485) No-load: 6.9W@24VDC IES618-2F-4DI(RS-485) Full-load: 7.8W@24VDC
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ 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): 70mm×160mm×130mm
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 ● Air discharge: ±8kV ● Contact discharge: ±6kV IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3 ● Power supply: ±2kV ● Ethernet port: ±1kV Shock: IEC60068-2-27 Free fall: IEC60068-2-23 Vibration: IES 60068-2-6
Authentication	CE, FCC, RoHS
Warranty	5 years

Ordering Information

Model	100M Fiber Port	100M Copper Port	RS-485 (with Isolation)	Power Supply
IES618-4DI(RS-485)-N	—	8	4	12~48VDC dual power supply
IES618-2F-4DI(RS-485)-N	2	6	4	
IES618-4F-4DI(RS-485)-N	4	4	4	