



IES615-2DI Series

DIN-Rail Mounting or Wall Mounting

Layer 2 Managed Industrial Ethernet Switch with 2 3IN1 Isolated Serial Ports

- Support 2 3IN1 serial ports, 5 100M fiber or copper ports optional
- Adopt SW-Ring patent technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support multiple serial port work modes such as TCP Client, TCP Server, UDP, TcpAuto, advanced TCP Server and advanced UDP
- Support redundant 12~48VDC power supply input, non-polarity, reverse connection protection
- Support -40~75°C wide operating temperature range



Industrial Grade



RPS

Introduction

IES615-2DI series are layer 2 managed industrial Ethernet switches with 2 3IN1 serial ports and 5 Ethernet ports. This series include three types of products and provide multiple ports, such as 100M fiber ports, copper ports and 3IN1 serial ports. They also support DIN-Rail mounting and wall mounting, 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, IGMP Static Multicast, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on. Each serial port supports 4 TCP or UDP session connections and multiple operating modes like TCP Server. 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.

DIP switch can instantly restore factory defaults and achieve product upgrading. When the link failure of power supply or port occurs, ALARM indicator will light up 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, railway transportation, smart city, safe city, new energy, intelligent manufacturing and other industrial fields.

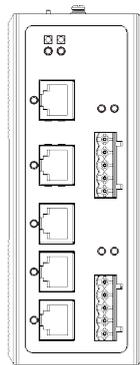
Features and Benefits

- ⊙ 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 rapid configuration and online upgrade of the device
- ⊙ Port statistics can be used for the port real time traffic statistics
- ⊙ User password can conduct user hierarchical management to improve the device administrative security
- ⊙ Relay alarm is convenient for troubleshooting of construction site
- ⊙ VLAN can simplify the network planning
- ⊙ Port trunking can increase network bandwidth and the reliability of network connection to achieve optimal bandwidth utilization
- ⊙ Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status

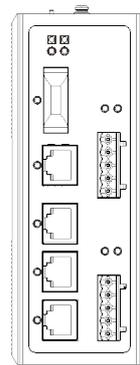
- ⦿ Static multicast can be used for filtering multicast traffic to save the network bandwidth
- ⦿ SW-Ring and RSTP can achieve network redundancy, preventing network storm
- ⦿ Support multiple operating modes of serial port: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP

Dimension

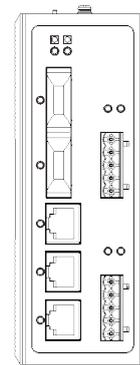
Unit:mm



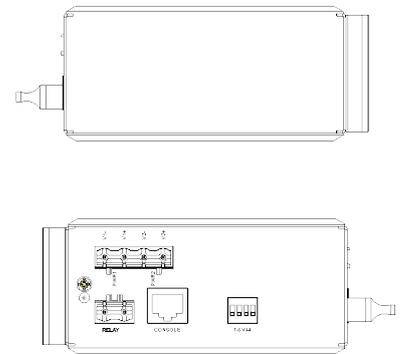
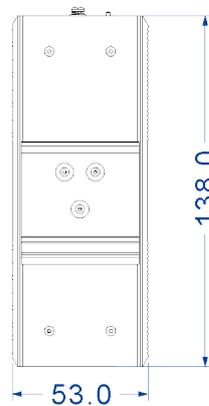
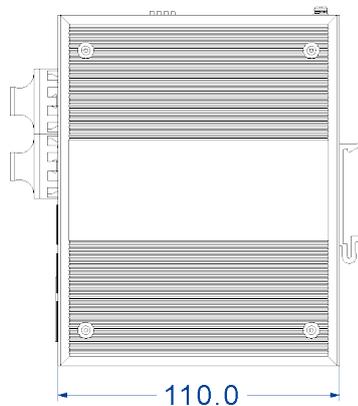
IES615-2DI(3IN1)



IES615-1F-2DI(3IN1)



IES615-2F-2DI(3IN1)



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 802.1w for Rapid Spanning Tree Protocol
IEEE 802.1Q for VLAN

	IEEE 802.1p for CoS
Management	Console/Telnet/WEB Management, SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, File Management, Port Statistics
Security	Classification of User Permissions, Relay Alarm (Port Alarm and Power Supply Alarm)
Switch Function	802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control
Unicast / Multicast	Static Multicast
Redundancy Protocol	SW-Ring, RSTP
Serial Port Server Function	2 serial port servers, each one supports 4 TCP or UDP session connections. Multiple operating modes: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP
Interface	<p>Copper port: 10/100Base-T(X)RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotuning</p> <p>Fiber port: 100Base-FX</p> <p>Console port: CLI command line management port (RS-232), RJ45</p> <p>Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity 1A@24VDC or 0.5A@120VAC</p>
Serial Port	<p>RS-232 signal: TXD, RXD, GND</p> <p>RS-422 signal: T+, T-, R+, R-, GND</p> <p>RS-485 signal: D+, D-, GND</p> <p>Check bit: None, Even, Odd, Space, Mark</p> <p>Data bit: 5bit, 6bit, 7bit, 8bit</p> <p>Stop bit: 1bit, 1.5bit , 2bit</p> <p>Baud rate: 300-115200bps</p> <p>Interface form: 5-pin terminal blocks</p> <p>Load capacity: RS-485/422 port supports 32-point polling environment(128-point could be customized)</p> <p>Direction control: RS-485 adopts automatic data flow control technology</p>
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator

<p>Switch Property</p>	<p>Transmission mode: store and forward MAC address: 2K Packet buffer size: 0.5Mbit Backplane bandwidth: 1.2G Switch time delay: <15μs</p>												
<p>Power Requirement</p>	<p>12~48VDC, 4-pin 7.62mm pitch terminal blocks Dual power supply redundancy, non-polarity, reverse connection protection Support built-in 3.0A over-current protection</p>												
<p>Power Consumption</p>	<table border="1"> <thead> <tr> <th>Model</th> <th>No-load (@24VDC)</th> <th>Full-load (@24VDC)</th> </tr> </thead> <tbody> <tr> <td>IES615-2DI (3IN1)</td> <td>2.14W</td> <td>2.71W</td> </tr> <tr> <td>IES615-1F-2DI (3IN1)</td> <td>2.54W</td> <td>3.10W</td> </tr> <tr> <td>IES615-2F-2DI (3IN1)</td> <td>3.00W</td> <td>3.48W</td> </tr> </tbody> </table>	Model	No-load (@24VDC)	Full-load (@24VDC)	IES615-2DI (3IN1)	2.14W	2.71W	IES615-1F-2DI (3IN1)	2.54W	3.10W	IES615-2F-2DI (3IN1)	3.00W	3.48W
Model	No-load (@24VDC)	Full-load (@24VDC)											
IES615-2DI (3IN1)	2.14W	2.71W											
IES615-1F-2DI (3IN1)	2.54W	3.10W											
IES615-2F-2DI (3IN1)	3.00W	3.48W											
<p>Environmental Limit</p>	<p>Operating temperature range: -40~75℃ Storage temperature range: -40~85℃ Relative humidity: 5% ~ 95% (no condensation)</p>												
<p>Physical Characteristic</p>	<p>Housing: IP40 protection, aluminum housing Installation: DIN-Rail mounting or wall mounting Dimension (W x H x D): 53mm×138mm×110mm</p>												
<p>Industrial Standard</p>	<p>IEC61000-4-2 (ESD), Level 3</p> <ul style="list-style-type: none"> Air discharge: ±8kV Contact discharge: ±6kV <p>IEC61000-4-4 (EFT), Level 3</p> <ul style="list-style-type: none"> Power supply: ±2kV Ethernet port: ±2kV Relay: ±2kV <p>IEC61000-4-5 (Surge), Level 3</p> <ul style="list-style-type: none"> Power supply /Relay: common mode±2kV, differential mode±1kV ; Ethernet port: ±2kV ; <p>Shock: IEC60068-2-27 Free fall: IEC60068-2-23 Vibration: IES 60068-2-6</p>												
<p>Certification</p>	<p>CE, FCC, RoHS</p>												



Warranty

5 years



Ordering Information

Available Models	100M Fiber Port	100M Copper Port	3IN1 Serial Port	Power Supply Range
IES615-2DI(3IN1)	—	5	2	12~48VDC
IES615-1F-2DI(3IN1)	1	4	2	dual power supply
IES615-2F-2DI(3IN1)	2	3	2	



Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China

TEL.: +86-755-26702668 ext 835 FAX: +86-755-26703485

E-mail: ics@3onedata.com

Website: www.3onedata.com

◀ [Please scan our QR code for more details](#)

*Product pictures and technical data in this datasheet are only for reference. Updates are subject to change without prior notice. The final interpretation right is reserved by 3onedata.