



# **IES615-2DI Series**

DIN-Rail Mounting or Wall Mounting Layer 2 Managed Industrial Ethernet Switch with 2 3IN1 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</li>
- Support redundant 12~48VDC power supply input, non-polarity, reverse connection protection
- Support 40~75°C wide operating temperature range



3onedata Co.,Ltd.

### Introduction

IES615-2DI series are layer 2 managed industrial Ethernet switch with 2 3IN1 serial ports and 5 Ethernet ports. This series include three types of products and provide multiple ports like 100M fiber and copper ports, 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 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, railway transportation, smart city, safe city, new energy, aerospace, intelligent manufacturing, military project and other industrial fields.

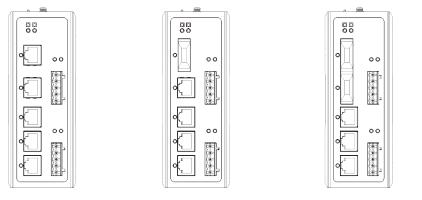
### **Features and Benefits**

- 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

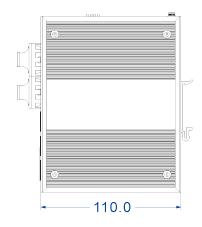
- SW-Ring and RSTP can achieve network redundancy, preventing network storm  $\odot$
- $\odot$ Support multiple operating modes of serial port: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP

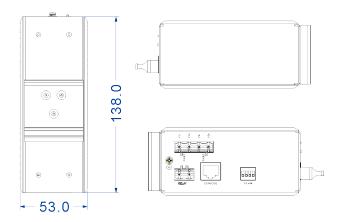
# **Dimension**

Unit:mm



IES615-2DI(3IN1) IES615-1F-2DI(3IN1) IES615-2F-2DI(3IN1)





## **Specification**

	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow Control
Standard & Protocol	IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS

### Your Reliable Industrial Communication Expert

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	Copper port: 10/100Base-T(X)RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning Fiber port: 100Base-FX Console port: CLI command line management port (RS-232), RJ45 Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity 1A@24VDC or 0.5A@120VAC	
Serial Port	RS-232 signal: TXD, RXD, GND RS-422 signal: T+, T-, R+, R-, GND RS-485 signal: D+, D-, GND Check bit: None, Even, Odd, Space, Mark Data bit: 5bit, 6bit, 7bit, 8bit Stop bit: 1bit, 1.5bit, 2bit Baud rate: 300-115200bps Interface form: 5-pin terminal blocks Load capacity: RS-485/422 port supports 32-point polling environment(128-point could be customized) Direction control: RS-485 adopts automatic data flow control technology	
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator	
Switch Property	Transmission mode: store and forward MAC address: 2K	

### Your Reliable Industrial Communication Expert

	Packet buffer size: 0.5Mbit Backplane bandwidth: 1.2G Switch time delay: <15µs				
Power Requirement	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				
Power Consumption	Model IES615-2DI (3IN1) IES615-1F-2DI (3IN1) IES615-2F-2DI (3IN1)	No-load (@24VDC) 2.14W 2.54W 3.00W	Full-load (@24VDC) 2.71W 3.10W 3.48W		
Environmental Limit	Operating temperature range: -40~75℃ Storage temperature range: -40~85℃ Relative humidity: 5% ~ 95% (no condensation)				
Physical Characteristic	Housing: IP40 protection, aluminum housing Installation: DIN-Rail mounting or wall mounting Dimension (W x H x D): 53mm×138mm×110mm				
Industrial Standard	<ul> <li>IEC61000-4-2 (ESD), Level 3</li> <li>Air discharge: ±8kV</li> <li>Contact discharge: ±6kV</li> <li>IEC61000-4-4 (EFT), Level 3</li> <li>Power supply: ±2kV</li> <li>Ethernet port: ±2kV</li> <li>Relay: ±2kV</li> <li>IEC61000-4-5 (Surge), Level 3</li> <li>Power supply /Relay: common mode±2kV, differential mode±1kV;</li> <li>Ethernet port: ±2kV;</li> <li>Shock: IEC60068-2-27</li> <li>Free fall: IEC60068-2-23</li> <li>Vibration: IES 60068-2-6</li> </ul>				
Certification	CE, FCC, RoHS				
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
IES615-2F-2DI(3IN1)	2	3	2	supply



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 I 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.