



## IES3020 Series

DIN-Rail Mounting

20-port 100M/Gigabit Layer 2 Unmanaged Industrial Ethernet Switch

- Support 4 Gigabit fiber ports (SFP slot), 16 100M fiber and copper ports optional
- Support dual power supply input, input voltage: 12~48VDC
- Support -40~75°C wide operating temperature range



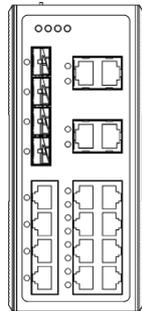
## Introduction

IES3020 series are 20-port 100M/Gigabit layer 2 unmanaged industrial Ethernet switches. This series include three types of products and provide 100M copper ports, 100M fiber ports, Gigabit SFP slots. It adopts DIN-Rail mounting to meet the requirements of different application scenes.

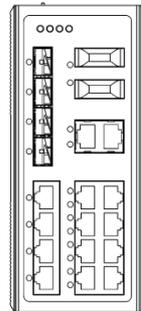
Power supply input is two independent power supply circuits, which can ensure the device normal operation when one of the power supplies breaks down. DIP switch can achieve power supply alarm, flow control and storm suppression. When power supply link failure occurs, ALARM indicator will be bright and 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, aerospace, intelligent manufacturing, military project and other industrial fields.

## Dimension

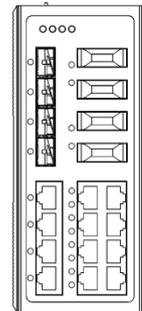
Unit:mm



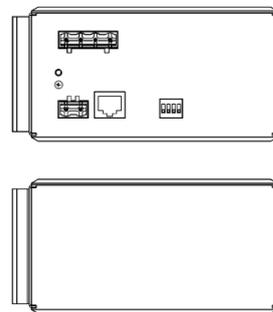
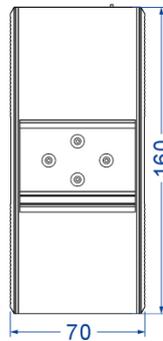
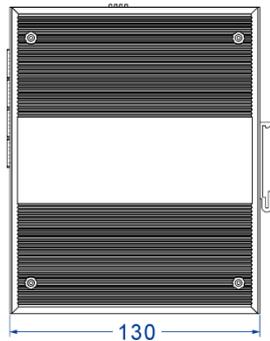
IES3020-4GS



IES3020-4GS-2F



IES3020-4GS-4F



# Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow Control												
Interface	Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotuning Fiber port: 100Base-FX, SC/ST/FC optional SFP slot: 1000Base-SFP Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity 5A@30VDC or 10A@125VAC												
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator												
Switch Property	Transmission mode: store and forward MAC address: 8K Packet buffer size: 3Mbit Backplane bandwidth: 12.8G Switch time delay: < 10μs												
Power Requirement	12~48VDC, 4-pin 7.62mm pitch terminal blocks Dual power supply redundancy, nonpolarity, reverse polarity protection Support 4A overcurrent protection												
Power Consumption	<table border="1"> <thead> <tr> <th>Model</th> <th>No-load (@24VDC)</th> <th>Full-load (@24VDC)</th> </tr> </thead> <tbody> <tr> <td>IES3020-4GS</td> <td>4.75W</td> <td>9.86W</td> </tr> <tr> <td>IES3020-4GS-2F</td> <td>5.86W</td> <td>10.63W</td> </tr> <tr> <td>IES3020-4GS-4F</td> <td>7.20W</td> <td>11.83W</td> </tr> </tbody> </table>	Model	No-load (@24VDC)	Full-load (@24VDC)	IES3020-4GS	4.75W	9.86W	IES3020-4GS-2F	5.86W	10.63W	IES3020-4GS-4F	7.20W	11.83W
Model	No-load (@24VDC)	Full-load (@24VDC)											
IES3020-4GS	4.75W	9.86W											
IES3020-4GS-2F	5.86W	10.63W											
IES3020-4GS-4F	7.20W	11.83W											
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 mounting Dimension (W x H x D): 70mm×160mm×130mm Weight: ≤1.02kg												
Industrial Standard	IEC 61000-4-2 (ESD), Level 4 <ul style="list-style-type: none"> <li>Air discharge: ±15kV</li> <li>Contact discharge: ±8kV</li> </ul> IEC 61000-4-4 (EFT), Level 4 <ul style="list-style-type: none"> <li>Power supply: ±4kV</li> </ul>												

	<ul style="list-style-type: none"><li>● Ethernet interface: <math>\pm 2\text{kV}</math></li><li>● Relay: <math>\pm 4\text{kV}</math></li></ul> <p>IEC 61000-4-5 (Surge), Level 2</p> <ul style="list-style-type: none"><li>● Power supply: common mode <math>\pm 1\text{kV}</math>, differential mode <math>\pm 500\text{V}</math></li><li>● Ethernet interface: <math>\pm 2\text{kV}</math></li><li>● Relay: common mode <math>\pm 1\text{kV}</math>, differential mode <math>\pm 500\text{V}</math></li></ul> <p>Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6</p>
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	5 years



## Ordering Information

Available Models	Gigabit SFP Slot	100M Fiber Port	100M Copper Port	Power Supply Range
IES3020-4GS	4	-	16	12~48VDC dual power supply
IES3020-4GS-2F	4	2	14	
IES3020-4GS-4F	4	4	12	



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](mailto:ics@3onedata.com)

Website: [www.3onedata.com](http://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.