# **3onedata**

## IES2220 Series Unmanaged Industrial Ethernet Switch Quick Installation Guide



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### [Package Checklist]

Please check whether the package and accessories are intact while using the switch for the first time.

- 1. Industrial Ethernet switch 2.
- 3. DIN-Rail mounting attachment 4. Warranty card

Certification

If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.

## [Product Overview]

This series are unmanaged DIN-Rail industrial Ethernet switches. Models as follows:

Model I. IES2220-16T4GS-2P48 (16 100M copper ports +

4 Gigabit SFP slots + 2 48VDC power supplies) Model II. IES2220-16T4GS-P220 (16 100M copper ports

+ 4 Gigabit SFP slots +1 220VAC power supply)

- Model III. IES2220-16P4GS-2P48-120W (16 100M PoE copper ports + 4 Gigabit SFP slots + 2 48VDC power supplies + 120W POE power) Model IV. IES2220-16P4GS-2P48-200W (16 100M PoE copper ports + 4 Gigabit SFP slots + 2 48VDC power supplies + 200W POE power) Model V.IES2220-16P4GS-2P24-120W (16 100M POE copper ports + 4 Gigabit SFP slots +2 24VDC power supplies + 120W POE power)
- Model VI. IES2220-8T8P4GS-2P48-120W (8 100M copper ports + 8 100M PoE copper ports + 4 Gigabit SFP slots + 2 48VDC power supplies +120W POE power)
- Model VII. IES2220-8T8P4GS-2P48-200W (8 100M copper ports + 8 100M PoE copper ports + 4 Gigabit SFP slots + 2 48VDC power supplies + 200W POE power)
- Model VIII.IES2220-8T8P4GS-2P24-120W (8 100M copper ports + 8 100M PoE copper ports + 4 Gigabit SFP slots + 2 24VDC power supplies + 120W POE power)

## [AC Panel Design]

> Rear view, Bottom view and Top view



> Front view and Side view





- 1. Wall-mounting location hole
- 2. DIN-Rail mounting kit
- 3. AC power input terminal block
- 4. Relay alarm output terminal block (reserved)
- 5. Console port (reserved)
- 6. DIP switch (reserved)
- 7. Grounding screw
- 8. Device running indicator RUN
- 9. Relay alarm indicator ALM (reserved)
- 10. Power input status indicator PWR
- 11. 100M copper port connection indicator
- 12. 100M copper port
- 13. Gigabit SFP slot
- 14. Gigabit SFP connection indicator

## 【DC Panel Design】

> Rear view, Bottom view and Top view



Front view



- 1. Wall-mounting location hole
- 2. DIN-Rail mounting kit
- 3. DC power input terminal block
- 4. Relay alarm output terminal block (reserved)
- 5. Console port (reserved)
- 6. DIP switch (reserved)
- 7. Grounding screw
- 8. Device running indicator RUN
- 9. Relay alarm indicator ALM (reserved)
- 10. Power input status indicator P1/P2
- 11. 100M copper port connection indicator
- 12. 100M copper port
- 13. Gigabit SFP slot
- 14. Gigabit SFP connection indicator
- 15. 100M PoE port
- 16. PoE indicator

### [Mounting Dimension]

Unit: mm





- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

### [DIN-Rail Mounting]

The product adopts 35mm standard DIN-Rail mounting, which is suitable for most of the industrial scenes. Mounting steps as below:



- Step 1 Check if the DIN-Rail mounting kit is installed firmly.
- Step 2 Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips:

Insert a little to the bottom, lift upward and then insert to the top.

Step 3 Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

### [Disassembling DIN-Rail]

Step 1 Device power off.

Step 2 After lift the device upward slightly, first shift out

the top of DIN-Rail mounting kit, then shift out the bottom of DIN-Rail, disassembling ends.

## $\Delta$ Notes before power on:

- Power ON operation: first connect power line to the connection terminal of device power supply, then power on.
- Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

### [Power Supply Connection]

### DC power supply 24VDC



This series of model V, model VIII provide 6 pins 5.08mm pitch input terminal blocks, including 4 pins power supply terminal blocks on the left side. It provides two independent DC power supply systems of P1 and

P2. The power supply is anti-reverse connection. Power input voltage: 24VDC

### DC power supply 48VDC



This series of model I, model III, model IV, model VI and model VII provide 6 pins 5.08mm pitch input terminal blocks, including 4 pins power supply terminal blocks on the

left side. It provides two independent DC power supply systems of P1 and P2. The power supply is anti-reverse connection.

Power input voltage of model III, model IV, model VI and model VII: 48VDC, power input voltage of model I: 48VDC (12~48VDC).

#### AC power supply 220VAC



This series of model II supports AC single power supply and provide 6 pins 5.08mm pitch input terminal

blocks, including 4 pins power supply terminal blocks on the left side.

### Power input voltage: 220VAC (85~264VAC).

[PoE Power Supply Pin Connection]

	PoE port is pow		
1 8	Pin	1	
	Definition	V+	

port is powered by the following pins.

3	Pin	1	2	3	6
	Definition	V+	V+	V-	V-

### 【Checking LED Indicator】

The function of each LED is described in the table as below:

LED	Status	Description	
	ON	Power supply is connected	
		and running normally	
P1/P2/PWR	OFF	Power supply is	
		disconnected and running	
		abnormally.	
AL N4	ON	Reserved	
ALM	OFF	Reserved	
	ON	The device is powered on	
		or the device is abnormal.	
RUN	OFF	The device is powered off	
		or the device is abnormal.	
	Blinking	System is running well.	
	ON	Ethernet port connection is	
Link/Act		active.	
(1-16,	Blinking	Data transmitted	
G1-G4)	OFF	Ethernet port connection is	
		inactive.	
	ON	POE port supply electricity	
		for other devices normally	
PUE (1-8/16)	OFF	POE is disabled or	
		disconnected	

## [Specification]

Panel		
100M POE copper port	10/100 Base-T(X) RJ45,	
	automatic flow control,	
	full/half duplex mode,	
	MDI/MDI-X autotunning,	

	POE port, the output power
	consumption is 15W or 30W.
100M copper port	10/100 Base-T(X) RJ45,
	automatic flow control,
	full/half duplex mode,
	MDI/MDI-X autotunning
DOE ning	V+, V+, V-, V- are
	corresponding to 1, 2, 3, 6.
Gigabit SFP	1000Base-SFP
Console port	Reserved
Alarm interface	Reserved
	Run indicator, interface
Indicator	indicator power indicator,
Indicator	alarm indicator (reserved),
	PoE indicator
Exchange attributes	
Backplane bandwidth	12.8G
Packet buffer size	3Mbit
MAC table size	8K
Power supply	
· · · · · · · · · · · · · · · · · · ·	
	Power supply input voltage:
	Power supply input voltage: 48VDC, 24VDC, 220VAC
Input power supply	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power
Input power supply	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power supply redundancy,
Input power supply	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power supply redundancy, anti-reverse
Input power supply	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power supply redundancy, anti-reverse 6-pin 5.08mm pitch terminal
Input power supply	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power supply redundancy, anti-reverse 6-pin 5.08mm pitch terminal blocks, including 4-pin
Input power supply Access terminal	Power supply input voltage:48VDC, 24VDC, 220VACSupport DC dual powersupply redundancy,anti-reverse6-pin 5.08mm pitch terminalblocks, including 4-pinpower supply terminal
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Input power supply Access terminal Consumption	Power supply input voltage: 48VDC, 24VDC, 220VAC Support DC dual power supply redundancy, anti-reverse 6-pin 5.08mm pitch terminal blocks, including 4-pin power supply terminal blocks
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Input power supply Access terminal Consumption	Power supply input voltage:48VDC, 24VDC, 220VACSupport DC dual powersupply redundancy,anti-reverse6-pin 5.08mm pitch terminalblocks, including 4-pinpower supply terminalblocksNo-load consumption≤157W@48VDC
Input power supply Access terminal Consumption DC products	Power supply input voltage:48VDC, 24VDC, 220VACSupport DC dual powersupply redundancy,anti-reverse6-pin 5.08mm pitch terminalblocks, including 4-pinpower supply terminalblocksNo-load consumption≤157W@48VDCFull-load consumption
Input power supply Access terminal Consumption DC products	Power supply input voltage:         48VDC, 24VDC, 220VAC         Support DC dual power         supply redundancy,         anti-reverse         6-pin 5.08mm pitch terminal         blocks, including 4-pin         power supply terminal         blocks         No-load consumption         ≤157W@48VDC         Full-load consumption         ≤157.2W@48VDC
Input power supply Access terminal Consumption DC products	Power supply input voltage:48VDC, 24VDC, 220VACSupport DC dual powersupply redundancy,anti-reverse6-pin 5.08mm pitch terminalblocks, including 4-pinpower supply terminalblocksNo-load consumption≤157W@48VDCFull-load consumption≤157.2W@48VDCNo-load consumption
Input power supply Access terminal Consumption DC products	Power supply input voltage:48VDC, 24VDC, 220VACSupport DC dual powersupply redundancy,anti-reverse6-pin 5.08mm pitch terminalblocks, including 4-pinpower supply terminalblocksNo-load consumption≤157W@48VDCFull-load consumption≤157.2W@48VDCNo-load consumption≤157.2W@48VDCNo-load consumption≤157.2W@48VDCNo-load consumption≤157.2W@220VAC
Input power supply Access terminal Consumption DC products AC products	Power supply input voltage:         48VDC, 24VDC, 220VAC         Support DC dual power         supply redundancy,         anti-reverse         6-pin 5.08mm pitch terminal         blocks, including 4-pin         power supply terminal         blocks         No-load consumption         ≤157.2W@48VDC         Full-load consumption         ≤157.2W@48VDC         No-load consumption         ≤9.2W@220VAC         Full-load consumption

Working environment	
Working temperature	-40~75℃
Storage temperature	<b>-40~85</b> ℃
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)