CJ-4DI4DO2AI-W

4×DI + 4×DO + 2×AI + 1× PT100 + 1×RS485 + 1×100M RJ45 WiFi Remote I/O



- 4×DI channels with both dry and wet contact wiring, including PNP/NPN in wet mode
- 4×relay DO channels, rated 5A at 250 V AC or 5A at
- 30 V DC
- 4×AI channels, each configurable for 0~10 V or 4~20 mA, with accuracy better than ±1%
- 1×PT100 temperature detection channel
- 1×RS485, 1×10/100M WAN/LAN combo port
- Built-in 2.4 GHz Wi-Fi, transmission range up to 100 m in open environments
- Support Modbus TCP/RTU protocol conversion
- Hardware watchdog for 24/7 stable operation
- Metal shell, IP30-rated housing protection
- DC12~36V input voltage, Level 4 EMC protection
- -20℃~+70℃ operating temperature range

Product Description

CJ-4DI4DO2AI-W is an industrial-grade network I/O controller designed for flexible local and remote monitoring and control. The device integrates 4 digital inputs, 4 relay outputs, 2 analog inputs, and 1 PT100 temperature input, providing comprehensive data acquisition and control capabilities for industrial and IoT applications.

Equipped with a 100 Mbps WAN/LAN port and 2.4 GHz Wi-Fi connectivity, CJ-4DI4DO2AI-W allows seamless integration into wired and wireless local networks. The device supports Modbus RTU protocol for data processing and automatic Modbus TCP/RTU protocol conversion, ensuring easy integration with PLCs, SCADA systems, and third-party IoT platforms.

The controller provides flexible I/O linkage logic, enabling users to configure trigger conditions for automatic actions. Output states can be set to retain their last condition after power-on or reset to default, improving operational flexibility. Featuring a built-in hardware watchdog, robust metal enclosure with IP30 protection, and wide electrical protection, CJ-4DI4DO2AI-W ensures reliable 24/7 operation in demanding industrial environments.

Product Features

- 4×relay output channels, rated at 5A at 250 V AC or 5A at 30 V DC
- Configurable output state retention after power-on or reboot, supporting last-state hold or reset to OFF
- 4×digital input channels supporting both dry and wet contact wiring
- 2×analog input channels supporting 0~10 V voltage or 4~20 mA current detection
- 1×PT100 temperature input channel with three-wire temperature measurement
- 1×100 Mbps WAN/LAN port for wired network integration, configurable via register settings
- Support 2.4 GHz Wi-Fi connectivity with coverage up to 100 m, supporting AP and STA modes
- Support up to 8 user-configurable conditional control rules, enabling automatic IO linkage based on trigger conditions
- Support multiple Modbus function codes: 0x01, 0x02, 0x03, 0x04, 0x05, 0x06, 0x0F, 0x10
- Support active data reporting
- Support TCP Client socket connections to remote servers
- Optional two working modes: master mode and slave mode. Master mode supports cascading multiple Modbus RTU devices via RS485. Slave mode supports simultaneous control via network and RS485
- Use Modbus RTU for data processing with automatic Modbus TCP/RTU protocol conversion
- Support connection to third-party IoT platforms
- Support FTP remote firmware upgrade
- Support local RS485 firmware upgrade
- Built-in hardware watchdog for high reliability and 24/7 stable operation
- Multiple LED indicators for real-time device status display
- Wide DC 12~36 V power input with over-current, over-voltage, and reverse polarity protection
- Industrial metal enclosure with IP30 protection rating

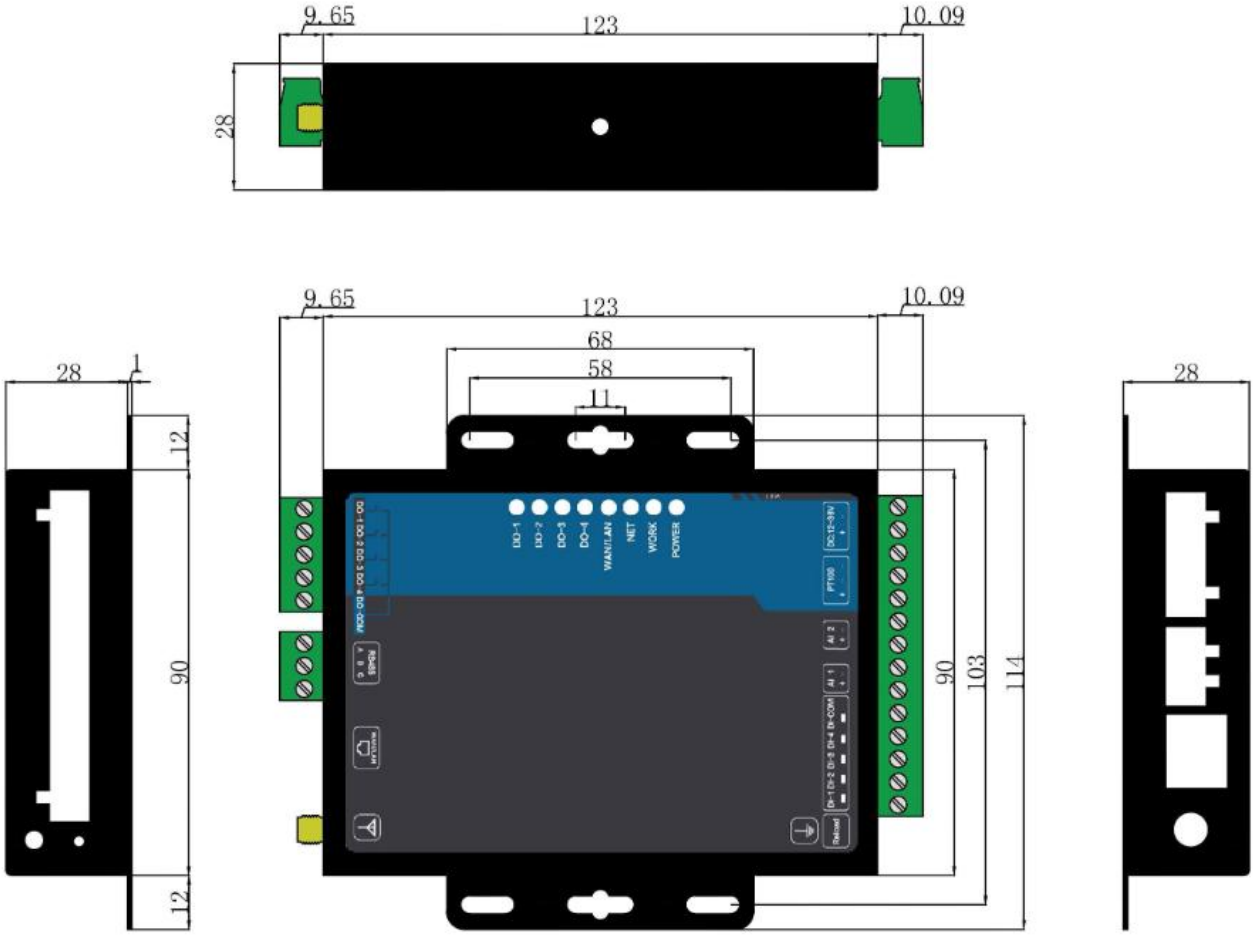
Technical Specifications

Ethernet	WAN/LAN	1×10/100M RJ45 port
WiFi	Wi-Fi Wireless LAN	Support 802.11b/g/n
	Antenna	2.4G Wi-Fi suction magnetic antenna
	Coverage distance	100 m in open areas
Standard Frequency Bands	TD-LTE	Band 38/39/40/41
	FDD-LTE	Band 1/3/5/8
	GSM	Band 3/8
Hardware Parameters	Communication Interface	RS485: 300~230400bps
	Operating Voltage	12~36V
	DI Input (Dry Contact)	Dry contact input, short DI to COM
	DI Input (Wet Contact)	Wet contact input (9~36 V)
	DO Output	AC 250V 5A
		DC 30V 5A
	Voltage Acquisition Range	0~10V (error less than 1%)
	Current Acquisition Range	4~20mA (error less than 1%)
	Temperature Detection Range	-100℃~200℃ (error less than 1%)
	Operating Temperature	-20℃~+70℃
	Storage Temperature	-40℃~+85℃
	Operating Humidity	5%~95% (non-condensing)
	Storage Humidity	1%~95% (non-condensing)
	Size	142.7×114×28 mm

	Operating Mode	Master mode, slave mode
	Setting Command	Modbus RTU
	Network Protocol	Modbus TCP, Modbus RTU
	Customer Application Software	Support configuration software
Software Features	DNS	Support
	Transmission Method	Support TCP client, TCP server
EMC Level	ESD	IEC61000-4-2, Level 4
	Surge	IEC61000-4-5, Level 3
	Surge Pulse	IEC61000-4-4, Level 3

Dimensions

Unit: mm



Ordering Information

Model	DI	DO	AI	PT100	100M WAN/LAN	RS485	WiFi	Input Voltage
CJ-4DI4DO4AI-W	4	4	2	-100℃~200℃	1	1	2.4GHz	DC12~36V

Contact Us

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