CJ-4DI4DO2AI

2×AI + 4×DI + 4×DO + 1× PT100 + 1×RS485 CAT-1 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 interface, enabling device local software-based control
- 4G CAT-1 connectivity, enabling remote control via cloud
- Support Modbus TCP/RTU protocol conversion
- Hardware watchdog for 24/7 stable operation
- Metal shell, IP30-rated housing protection
- DC 12~36V wide input voltage
- -20℃~+70℃ operating temperature range
- Level 4 EMC protection

Product Description

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

CJ-4DI4DO2AI supports RS485 local control as well as remote. It enables flexible deployment in various networking environments. It adopts Modbus RTU for data processing and supports automatic Modbus TCP/RTU protocol conversion, allowing seamless integration with PLCs, SCADA systems, and third-party IoT platforms.

The device supports both master and slave operating modes, providing flexible system architecture options for distributed monitoring and centralized control. It is well-suited for applications such as agricultural greenhouses, unattended equipment rooms, and smart lighting systems.

Featuring a built-in hardware watchdog, industrial metal enclosure, and comprehensive electrical protection, CJ-4DI4DO2AI ensures long-term stable operation in harsh environments. With support for FTP remote firmware upgrade and flexible I/O linkage logic, it provides a reliable, easy-to-use solution for industrial automation and remote control projects.

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
- 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

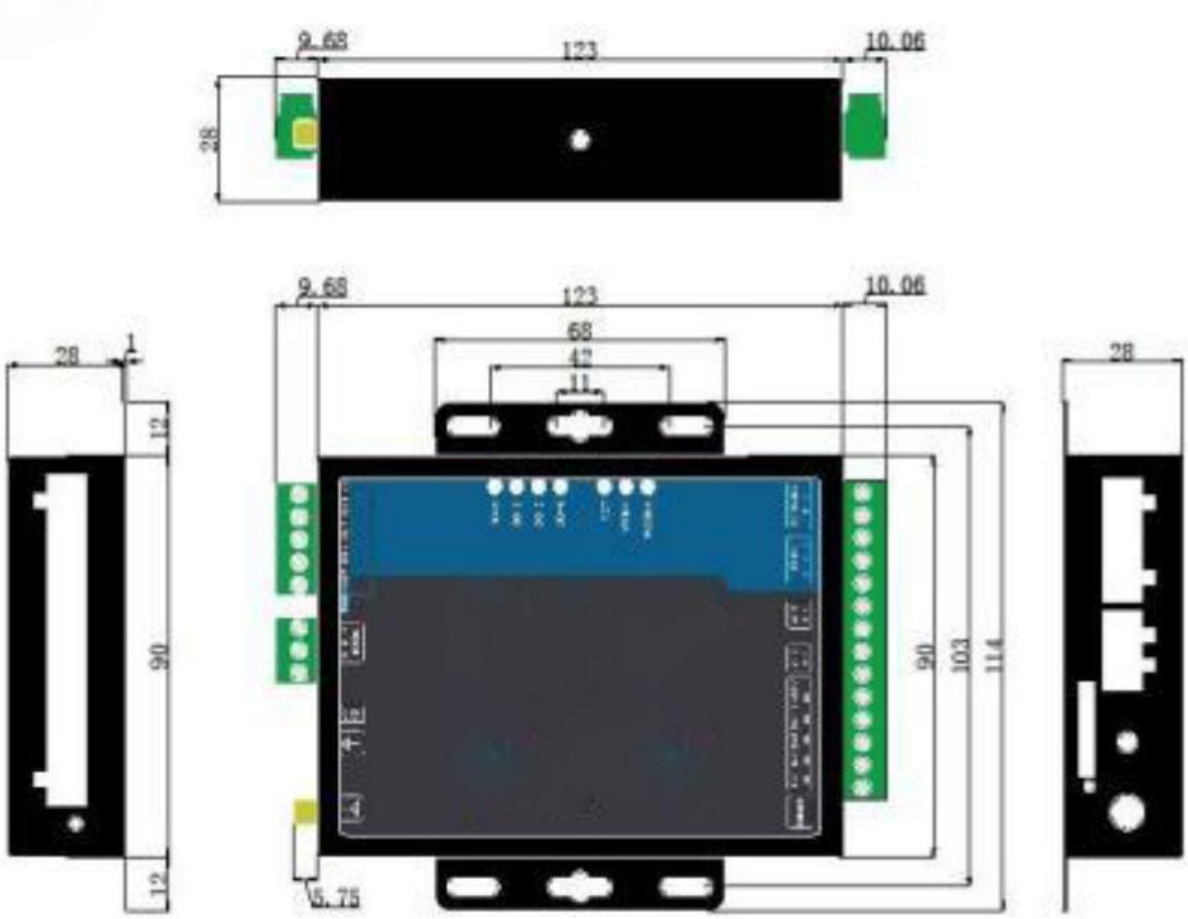
Technical Specifications

Wireless Parameters	Wireless Network	LTE Cat-1
Technical Specifications	TD-LTE	3GPP Release 13, Cat-1 Downlink up to 7.5 Mbps, Uplink up to 1 Mbps
	FDD-LTE	3GPP Release 13, Cat-1 Downlink up to 10 Mbps, Uplink up to 5 Mbps
	GSM	GPRS Class 12 Downlink 384 kbps, Uplink 128 kbps
Standard Frequency Bands	TD-LTE	Band 38/39/40/41
	FDD-LTE	Band 1/3/5/8
	GSM	Band 3/8
Transmit Power	TD-LTE Band 38/39/40/41	+23 dBm (Power class 3)
	FDD-LTE Band 1/3/5/8	+23 dBm (Power class 3)
	GSM Band 8	+33 dBm (Power class 4)
	GSM Band 3	+30 dBm (Power class 1)
Hardware Parameters	Communication Interface	RS485: 300~230400bps
	DI Input	Dry/wet, PNP/NPN Powered via the device power terminal or an external power source, with a voltage range of 9~32 V. A switch or PNP/NPN sensor can be connected in series between COM and DI-x to control the input power circuit.
	DO Output	AC 250V 5A
	DO Output	DC 30V 5A
	Operating Voltage	12~36V

	Operating Current	159mA (average)/222mA (max) @12V
	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
Software Parameters	Wireless Network Type	LTE Cat-1
	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
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	RS485	Cellular	Input Voltage
CJ-4DI4DO2AI	4	4	2	-100℃~200℃	1	4G	DC12~36V

Contact Us

COME-STAR COMMUNICATION(WUHAN) CO., LTD.

Address: Puneng Industrial Park, Fenghuang Garden 1st Road, East Lake High-Tech Development Zone, Wuhan, China.

Tel: +86-027-59257958

Mail: info@come-star.com

Official site: www.come-star.com

Copyright © Come-Star All rights reserved