CX-AI04DO04

4×AI + 4×DO + 1×RS485 Extendable Remote I/O Module



- 4 × AI channels with a 4~20 mA input range.
- 4 × relay-based DO channels, rated 3A at 30V DC and 250V AC.
- Equipped with opto-isolation for enhanced noise immunity
- 1×RS485 interface with Modbus RTU support
- Modular design for easy expansion and maintenance
- Hardware and software watchdog for system reliability
- Compact size with DIN-rail mount design
- Wide DC 12~24V power input
- Complies with IEC61000 EMC protection standard, meeting Level 3 requirements
- -25°C to +75°C operating temperature range
- V0 flame-retardant rating

Product Description

CX-AI04DO04 is an industrial-grade data acquisition and control I/O module launched by COME-STAR Communication. It provides 4 × analog input channels with a 4~20 mA acquisition range, and 4 × relay-based digital output channels rated 3A at 30 V DC and 250 V AC for reliable load control. The device includes 1 × RS485 interface and fully supports the Modbus RTU protocol. Multiple status LEDs are integrated to help users quickly understand device operation, and it is equipped with opto-isolation for enhanced noise immunity.

In terms of hardware design, CX-AI04DO04 adopts a modular architecture, enabling flexible expansion. It uses push-in spring terminals for faster and easier wiring. The enclosure features a V0 flame-retardant rating, ensuring that vertical burning stops within 10 seconds while allowing non-ignited plastic drips. The device meets EMC Level 3 (IEC 61000) requirements and offers a wide operating temperature range of –25℃ to +75℃. A hardware watchdog is also built in to enhance system reliability.

The CX-AI04DO04 can be seamlessly integrated with COME-STAR edge computing gateways, such as Cgate300 and Cgate310, enabling more comprehensive and versatile industrial applications.

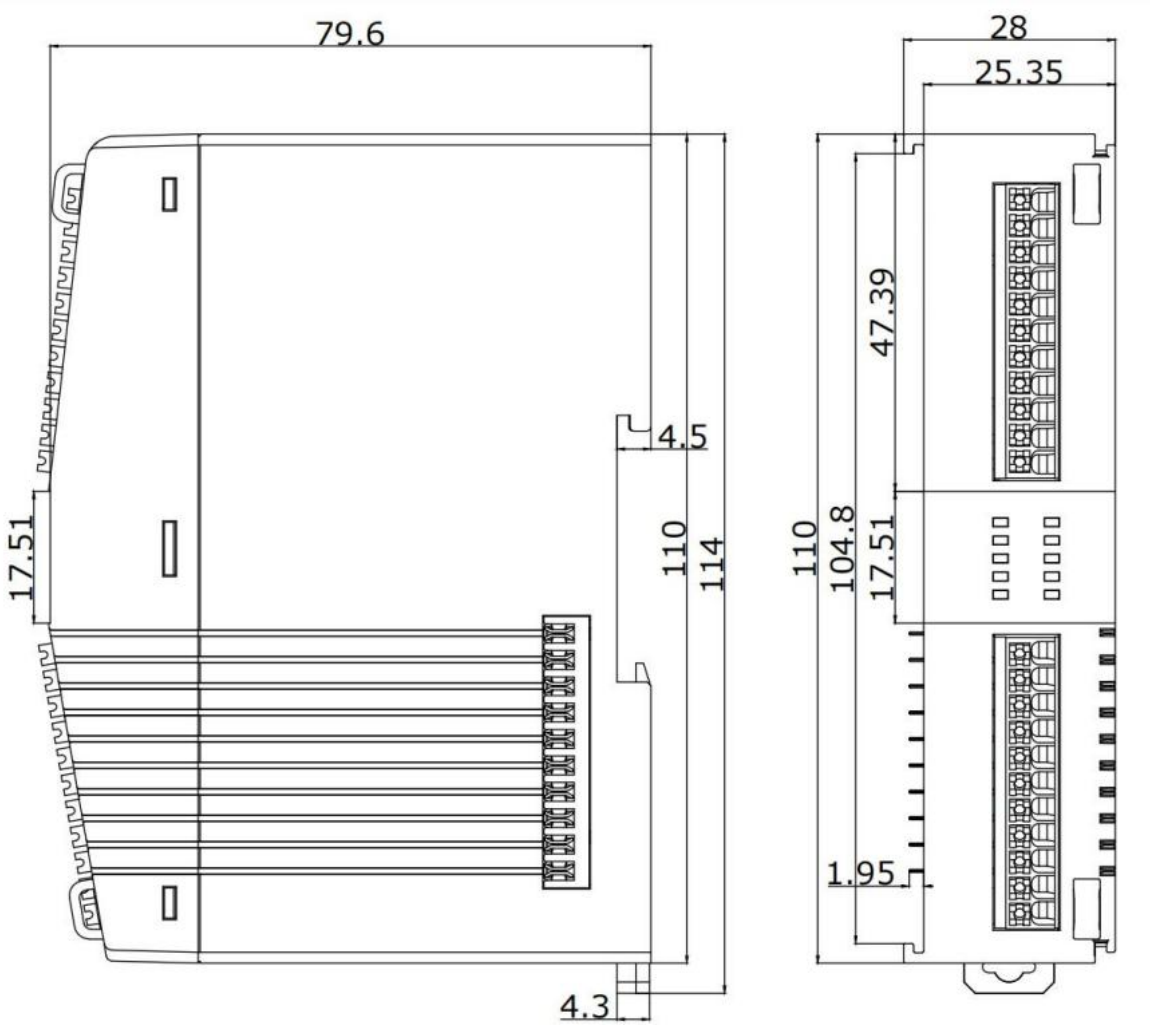
Technical Specifications

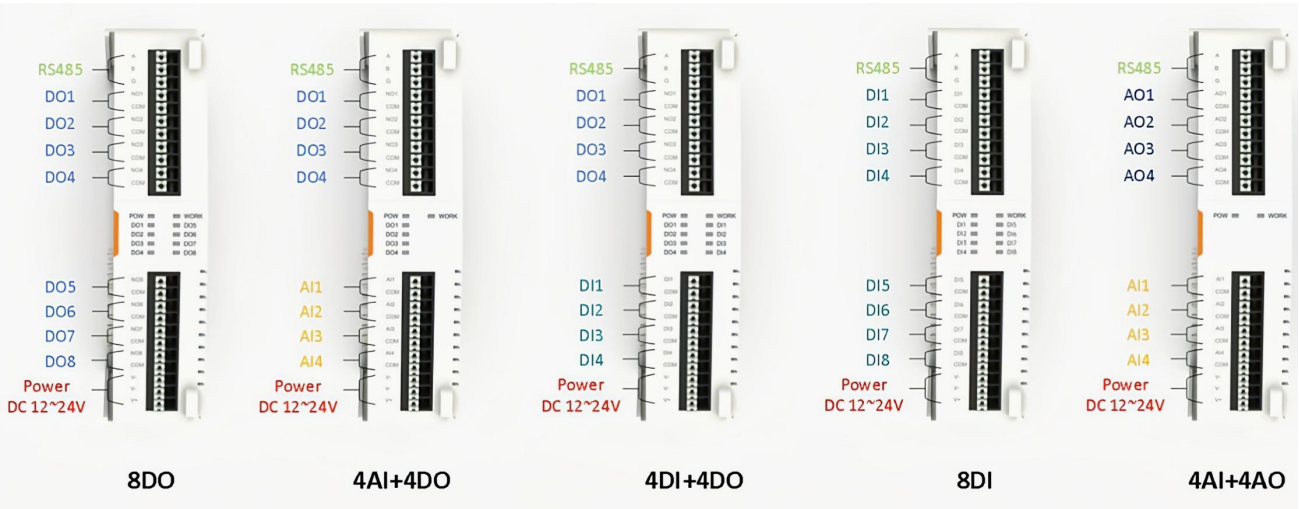
Items	Description	
Interface	RS485	Default: 9600, NONE, 8, 1
		Options for band rate: 4800, 9600, 115200, 230400
		Parity bit: NONE, EVEN, ODD
		Data bits: 8
		Stop bit(s) : 1, 2
Physical Specification	Dimensions	79.6×58×110 mm
	Installation	DIN rail mounting
Status LEDs	POW	Steady on: Power supply is normal
		Off: No power supply or abnormal power supply
	WORK	Blinking: Power is on, and the device is ready. System is booted up and running
	DO	Steady on: The channel output is activated
Power	Voltage Range	DC 12~24V
	Connection	2-pin socket
Protection	EMC Protection	Level 3, IEC 61000
	Watchdog	Hardware & Software watchdog
	Flame retardant rating	V0, burning stops within 10 seconds on a vertical part allowing for drops of plastic that are not inflames.
Temperature Humility	Operation temperature	-25℃ ~ +75℃
	Storage temperature	-40℃ ~ +105℃
	Operation humility	5%~95% (non-condensing)

I/O	AI	Analog input 4-20mA
	DO	Relays, the endurance is 100,000 operations. DC contacts rating @R (at resistive load) 3A / 30V DC. AC contacts rating @R (at resistive load) 3A / 250V AC, NO
Modbus	Slave address	Range: 1~255
		Default: 1

Dimensions

Unit: mm





Ordering Information

Model	CX-DI04DO04	CX-AI04DO04	CX-DO08	CX-DI08	CX-AI04DO04
Power Input Range	DC12-24V	DC12-24V	DC12-24V	DC12-24V	DC12-24V
Number of DI	4	0	0	8	0
Number of AI	0	4	0	0	4
Number of DO	4	4	8	0	0
Number of AO	0	0	0	0	4
Type of AI	/	Current	/	/	Current
Signal range of AI	/	4~20mA	/	/	4~20mA
Voltage range of DI	9~36V	/	/	9~36V	/
Type of DO	Relay	Relay	Relay	/	/
Capability of DO	3A	3A	3A	/	/
Type of AO	/	/	/	/	Current / Voltage
Signal range of AO	/	/	/	/	4~20mA 0~10V
Communication Port	RS485	RS485	RS485	RS485	RS485
Extendable	√	√	√	√	√

Contact Us

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