

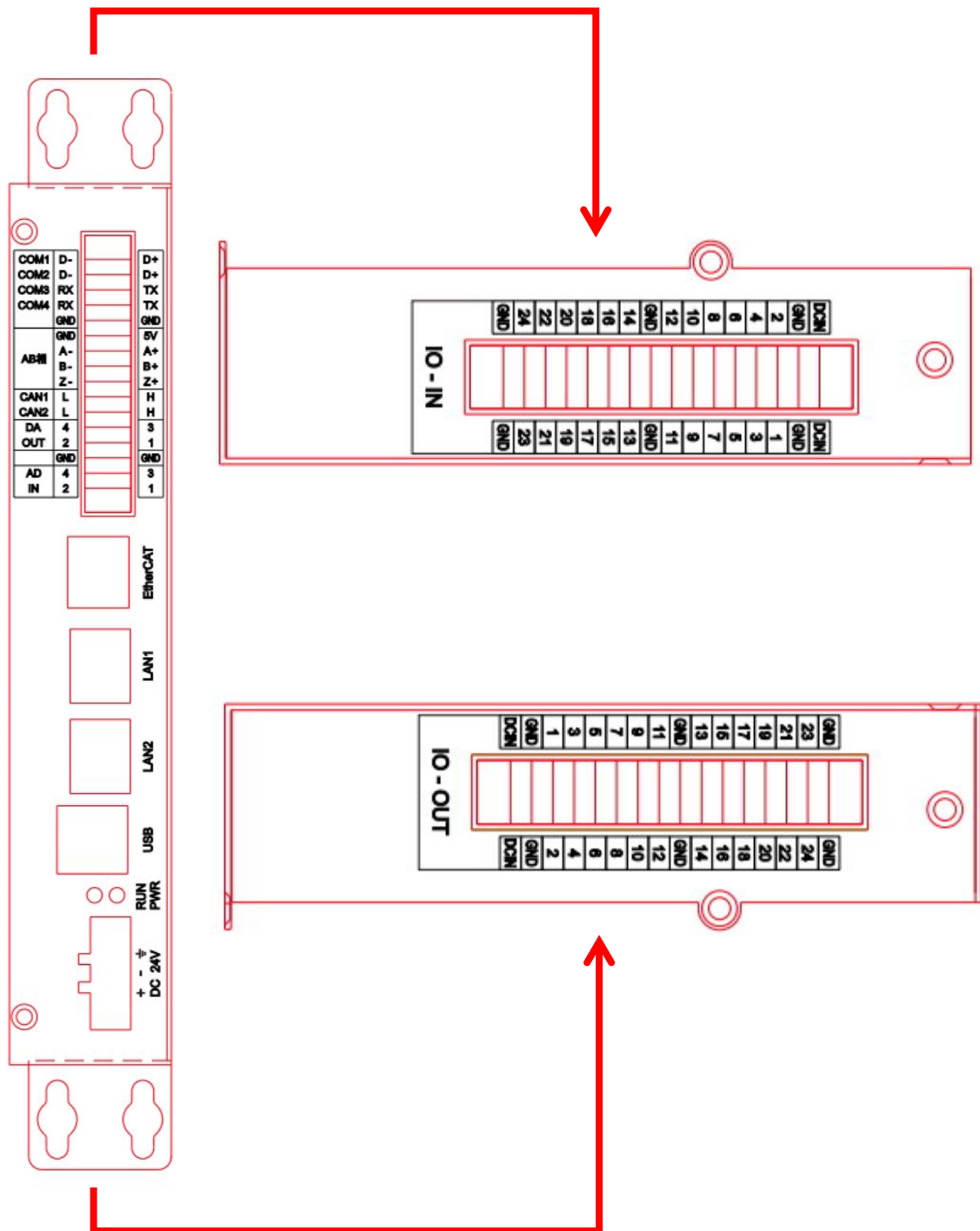
Controller C2200 Specification

Version: V1.0.1

> Basic Parameter List

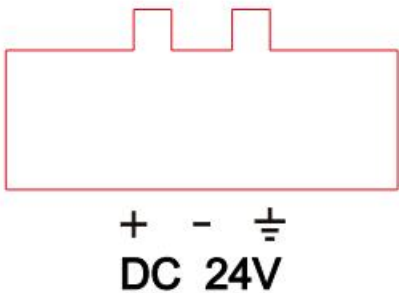
Item	Parameter
CPU	Allwinner T507, quad-core with a main frequency of 1.5GHz
Memory	1GB
Onboard Storage	EMMC Flash 8GB
OS	Linux
Ethernet port	1*RTL8211F Gigabit Ethernet port 1*RTL8152B Fast Ethernet port 1*IP101GR Fast Ethernet port
USB interface	2 * TypeA 2.0 interface
Serial port	1 * RS485, 2 * RS232
IO port	24-channel input, 24-channel output with optical isolation
Pulse interface	1-channel 5V encoder ABZ differential interface
CAN	1-channel MCP2515 CAN
Analog	0~10V, 4-channel input, 4-channel output, 12-bit precision
RTC	Supported
Power	DC 24V (±10%)
Power consumption	4W (excluding external circuits)
Operating temperature	-10~60°C
Storage temperature	-40~85 °C

> Interface Definition



Product interface diagram

3.1 Power Input

Terminal	Specifications	Description
 <p style="text-align: center;">+ - \perp DC 24V</p>	24V ($\pm 10\%$)	DC

3.2 Status Indicator

LED Name	Description
RUN	System running
PWR	Power indicator

3.3 USB Interface

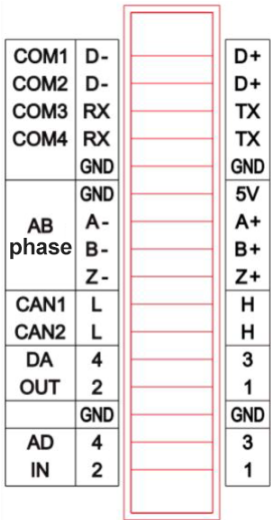
2 USB interfaces are both TypeA 2.0.

3.4 Network Port

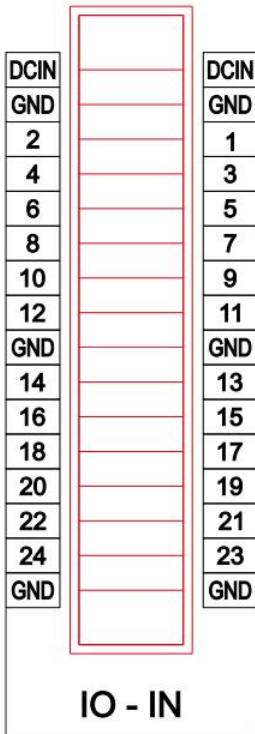
Network Port Name	Description	Default IP
LAN1	100M Ethernet port	192.168.1.13
LAN2	100M Ethernet port	192.168.2.13
EtherCAT	1G Ethernet port	N/A

3.5 External Interface

		Terminal name	Description	Terminal name	Description
COM1	D-	COM1 (D-)	Port 1 (485-)	COM1 (D+)	Port 1 (485+)
COM2	D-	COM2 (D-)	Reserved	COM2 (D+)	Reserved
COM3	RX	COM3 (RX)	Port 3 (232R)	COM3 (TX)	Port 3 (232T)
COM4	RX	COM4 (RX)	Port 4 (232R)	COM4 (TX)	Port 4 (232T)
	GND	GND	Signal ground	GND	Signal ground
AB phase	A-	AB phase (GND)	Encoder signal ground	AB phase (5V)	Encoder power 5V
	B-	AB phase (A-)	Encoder input signal A-	AB phase (A+)	Encoder input signal A+
	Z-	AB phase (B-)	Encoder input signal B-	AB phase (B+)	Encoder input signal B+
CAN1	L	AB phase (Z-)	Encoder input signal Z-	AB phase (Z+)	Encoder input signal Z+
CAN2	L	CAN1 (L)	CAN channel 1_L	CAN1 (H)	CAN channel 1_H
DA	4	CAN2 (L)	Reserved	CAN2 (H)	Reserved
OUT	2	DA_OUT (4)	Analog output channel 4	DA_OUT (3)	Analog output channel 3
	GND	DA_OUT (2)	Analog output channel 2	DA_OUT (1)	Analog output channel 1
AD	4	GND	Signal ground	GND	Signal ground
IN	2	AD_IN (4)	Analog input channel 4	AD_IN (3)	Analog input channel 3
		AD_IN (2)	Analog input channel 2	AD_IN (1)	Analog input channel 1



3.6 Digital Input

		Terminal Name	Description	Terminal Name	Description
		DCIN	Internal 24V	DCIN	Internal 24V
GND	Digital input ground	GND	Digital input ground		
2	Digital input channel 2	1	Digital input channel 1		
4	Digital input channel 4	3	Digital input channel 3		
6	Digital input channel 6	5	Digital input channel 5		
8	Digital input channel 8	7	Digital input channel 7		
10	Digital input channel 10	9	Digital input channel 9		
12	Digital input channel 12	11	Digital input channel 11		
GND	Digital input ground	GND	Digital input ground		
14	Digital input channel 14	13	Digital input channel 13		
16	Digital input channel 16	15	Digital input channel 15		
18	Digital input channel 18	17	Digital input channel 17		
20	Digital input channel 20	19	Digital input channel 19		
22	Digital input channel 22	21	Digital input channel 21		
24	Digital input channel 24	23	Digital input channel 23		
GND	Digital input ground	GND	Digital input ground		

3.7 Digital Output

		Terminal Name	Description	Terminal Name	Description
		GND	Digital output ground	GND	Digital output ground
		23	Digital output channel 23	24	Digital output channel 24
		21	Digital output channel 21	22	Digital output channel 22
		19	Digital output channel 19	20	Digital output channel 20
		17	Digital output channel 17	18	Digital output channel 18
		15	Digital output channel 15	16	Digital output channel 16
		13	Digital output channel 13	14	Digital output channel 14
		GND	Digital output ground	GND	Digital output ground
		11	Digital output channel 11	12	Digital output channel 12
		9	Digital output channel 9	10	Digital output channel 10
		7	Digital output channel 7	8	Digital output channel 8
		5	Digital output channel 5	6	Digital output channel 6
		3	Digital output channel 3	4	Digital output channel 4
		1	Digital output channel 1	2	Digital output channel 2
		GND	Digital output ground	GND	Digital output ground
		DCIN	Internal 24V	DCIN	Internal 24V

IO - OUT

Note: The input power supply and IO port power supply have been isolated by MOS tubes

3.8 Wiring Method

Digital input circuit

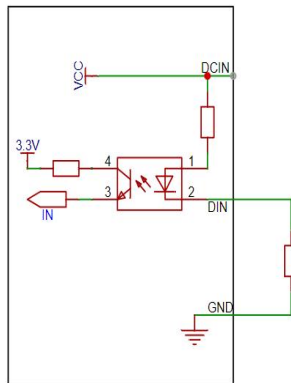


Figure 3-1 Input circuit wiring diagram

Digital output circuit

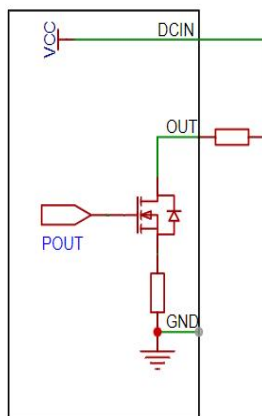


Figure 3-2 Output circuit wiring diagram (internal power supply)

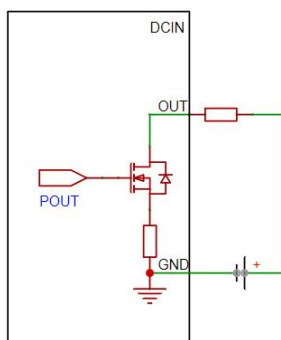


Figure 3-3 Output circuit wiring diagram (external power supply)

> Exterior Dimension Diagram

