

◆ **Product Type**

207-D204-XNS

32-channel digital output module with upright conformation

◆ **Specifications**

Size: (L122 x W66 x H104 mm)

Protocol: EtherCAT

Cable Type: CAT5 UTP/STP Ethernet Cable

Surge Protection: 10KV

IO Isolation Voltage: 3750Vrms

Output Type: NPN open collector Darlington transistors

Switch Capacity: each output channel is 100mA/channel maximum at 24V DC

Integral suppression on diodes for inductive loads

Response Time: On to Off about 50µs, Off to On about 10µs

Over Current Protection: 1A (max) for each port (8-channel)

Power Input Voltage: +24V DC ± 10%

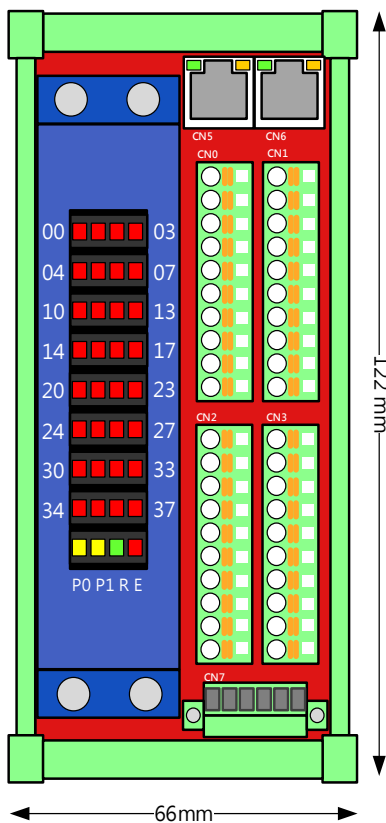
Power Consumption: 3W typical

Working Temperature: 0 ~ 60°C

◆ **Ordering Information**

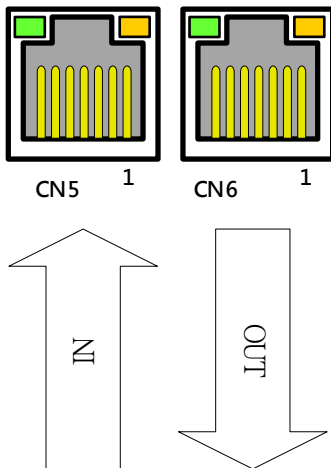
207-D204-XNS – 32-channel digital output with NPN

◆ **IO interface**



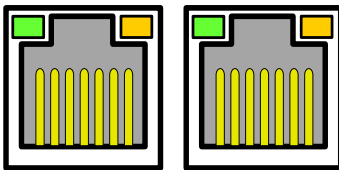
Label	Function
CN0	I/O Signal Connector
CN1	I/O Signal Connector
CN2	I/O Signal Connector
CN3	I/O Signal Connector
CN5	EtherCAT Communication IN
CN6	EtherCAT Communication OUT
CN7	Power Connector

◆ Communication IN and OUT

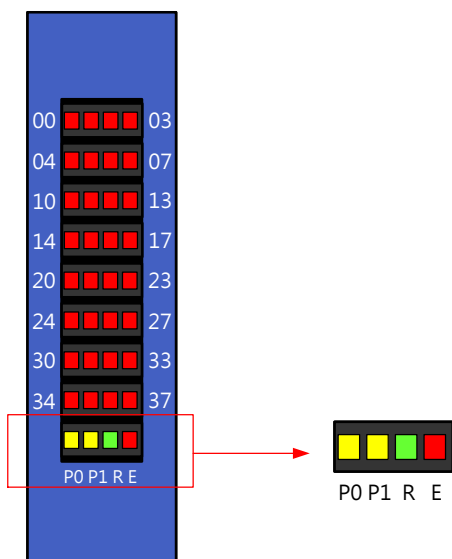


No.	Description
1	TX+
2	TX-
3	RX+
4	-
5	-
6	RX-
7	-
8	-

◆ Status LED

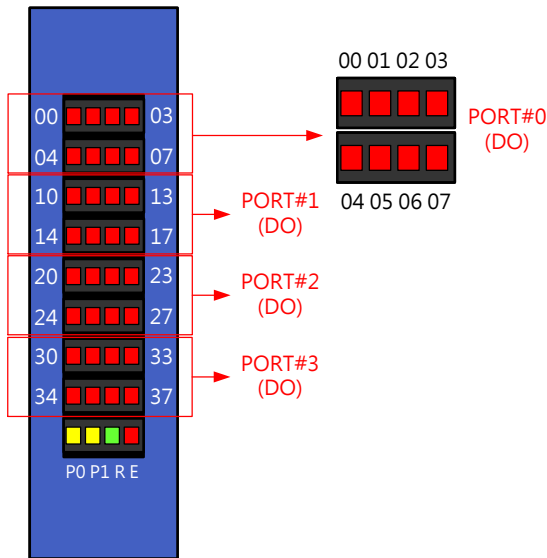


LED	Description
Right (Orange)	Link/Activity indicator: Blinking – There is activity on this port. Off – No link is established.
Left (Green)	Speed indicator: Green on – Operating as a 100/1000-Mbps connection. Off – Operating as a 10-Mbps connection.



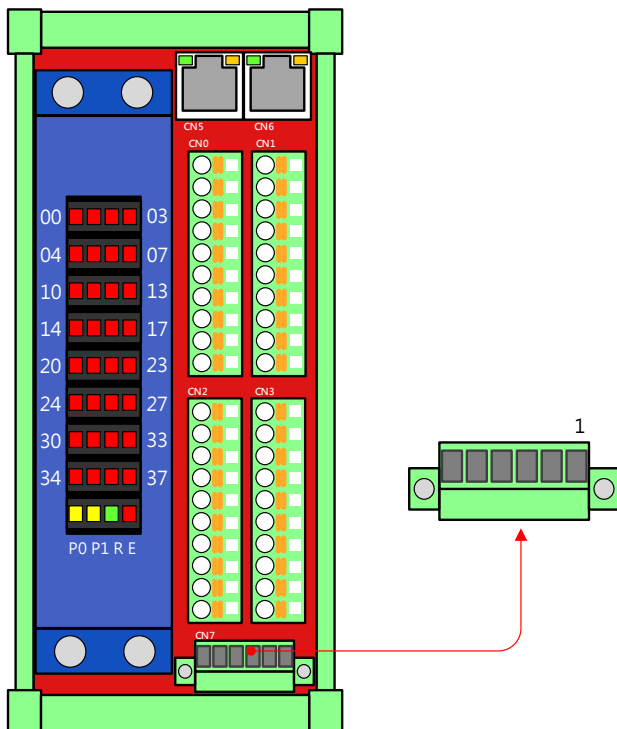
LED	Description
P0 - Yellow	DC +24V In Normal Level
P1 - Yellow	DC +5V Supply for Internal
R - Green	In Normal Communication
E - Red	Error Communication

◆ LED Description



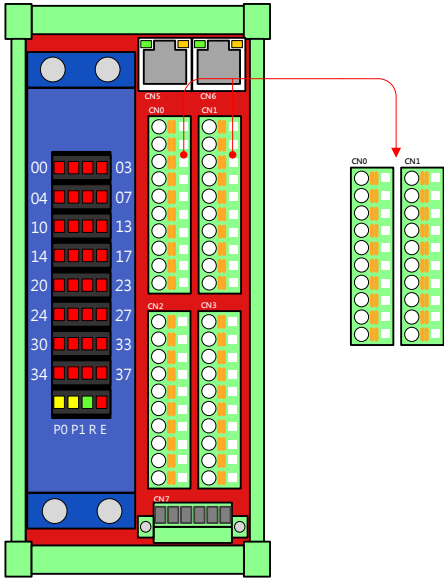
Disp	Label	Disp	Label	Disp	Label
00	Port#0 Bit0	14	Port#1 Bit4	30	Port#3 Bit0
01	Port#0 Bit1	15	Port#1 Bit5	31	Port#3 Bit1
02	Port#0 Bit2	16	Port#1 Bit6	32	Port#3 Bit2
03	Port#0 Bit3	17	Port#1 Bit7	33	Port#3 Bit3
04	Port#0 Bit4	20	Port#2 Bit0	34	Port#3 Bit4
05	Port#0 Bit5	21	Port#2 Bit1	35	Port#3 Bit5
06	Port#0 Bit6	22	Port#2 Bit2	36	Port#3 Bit6
07	Port#0 Bit7	23	Port#2 Bit3	37	Port#3 Bit7
10	Port#1 Bit0	24	Port#2 Bit4		
11	Port#1 Bit1	25	Port#2 Bit5		
12	Port#1 Bit2	26	Port#2 Bit6		
13	Port#1 Bit3	27	Port#2 Bit7		

◆ Power connector



Pin	Label	Function
1	24V	DC 24V Input
2	GND	DC 24V ground
3	FG	Field ground
4	24V	DC 24V Input
5	GND	DC 24V ground
6	FG	Field ground

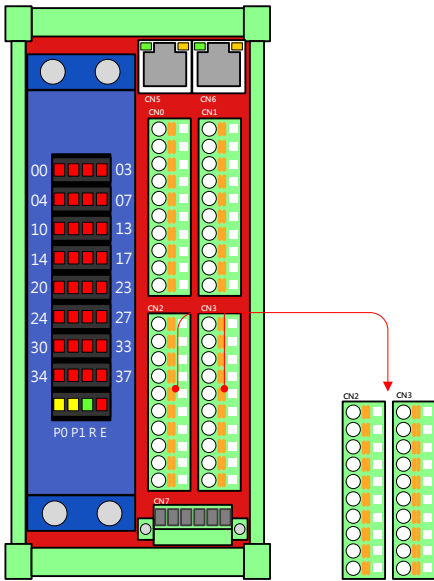
◆ I/O control connector



CN0		
Pin	Label	Function
P00	OUT_00	Port#0 Bit0 Output
P01	OUT_01	Port#0 Bit1 Output
P02	OUT_02	Port#0 Bit2 Output
P03	OUT_03	Port#0 Bit3 Output
P04	OUT_04	Port#0 Bit4 Output
P05	OUT_05	Port#0 Bit5 Output
P06	OUT_06	Port#0 Bit6 Output
P07	OUT_07	Port#0 Bit7 Output
24V	24V	DC 24V Output
GND	GND	DC 24V Ground

CN1		
Pin	Label	Function
P10	OUT_10	Port#1 Bit0 Output
P11	OUT_11	Port#1 Bit1 Output
P12	OUT_12	Port#1 Bit2 Output
P13	OUT_13	Port#1 Bit3 Output
P14	OUT_14	Port#1 Bit4 Output
P15	OUT_15	Port#1 Bit5 Output
P16	OUT_16	Port#1 Bit6 Output
P17	OUT_17	Port#1 Bit7 Output
24V	24V	DC 24V Output
GND	GND	DC 24V Ground

* Max. 100mA output current each 24V contact.

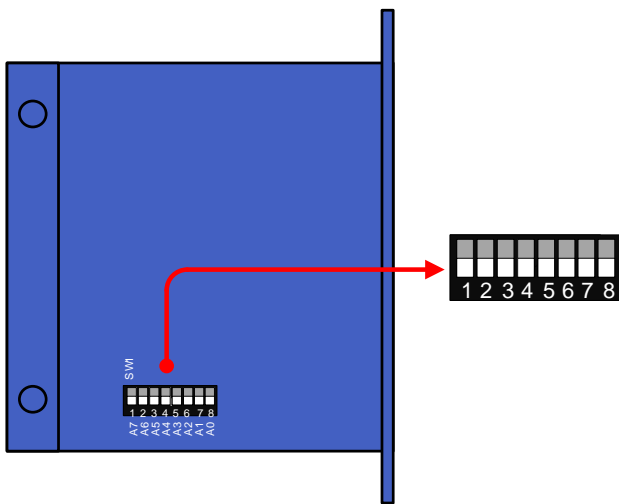


CN2		
Pin	Label	Function
P20	OUT_20	Port#2 Bit0 Output
P21	OUT_21	Port#2 Bit1 Output
P22	OUT_22	Port#2 Bit2 Output
P23	OUT_23	Port#2 Bit3 Output
P24	OUT_24	Port#2 Bit4 Output
P25	OUT_25	Port#2 Bit5 Output
P26	OUT_26	Port#2 Bit6 Output
P27	OUT_27	Port#2 Bit7 Output
24V	24V	DC 24V Output
GND	GND	DC 24V Ground

CN3		
Pin	Label	Function
P30	OUT_30	Port#3 Bit0 Output
P31	OUT_31	Port#3 Bit1 Output
P32	OUT_32	Port#3 Bit2 Output
P33	OUT_33	Port#3 Bit3 Output
P34	OUT_34	Port#3 Bit4 Output
P35	OUT_35	Port#3 Bit5 Output
P36	OUT_36	Port#3 Bit6 Output
P37	OUT_37	Port#3 Bit7 Output
24V	24V	DC 24V Output
GND	GND	DC 24V Ground

* Max. 100mA output current each 24V contact.

◆ SW1: node number setting



Pin	Label	On	Off
1	A7	1	0
2	A6	1	0
3	A5	1	0
4	A4	1	0
5	A3	1	0
6	A2	1	0
7	A1	1	0
8	A0	1	0

Note that node number = $128 \cdot A7 + 64 \cdot A6 + 32 \cdot A5 + 16 \cdot A4 + 8 \cdot A3 + 4 \cdot A2 + 2 \cdot A1 + 1 \cdot A0$.
 Default values are all off.

◆ Signal Circuit

Output Signal Circuit (NPN type)

