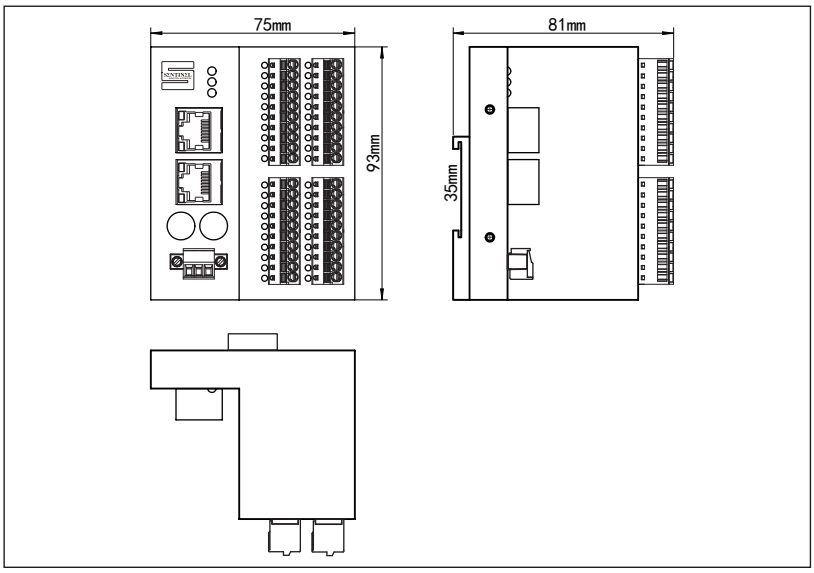
Compact IP20 CC-Link IE Field Basic protocol I/O Station

16 Digital PNP/NPN inputs
16 Digital outputs

CMBC-IOM16-0001



- CC-Link IE Field Basic remote I/O module
- Integrated Ethernet Switch
- Support 100Base-TX
- 2 RJ45 ports for the Ethernet connection
- 16 Digital PNP/NPN inputs
- 16 Digital outputs
- DIN guide rail installation
- Metal housing , Protection class IP20

Supply voltage	24VDC ± 10%
Operating current	< 200mA
Module and load power supply	UB and UL are internally isolated and need to be powered separately
Load power group	Divided into 4 groups, which need separate power supply

Input	
Number of channels	16
Input type	PNP or NPN
input impedance	3K
Input rated current	7mA
Input delay	5ms
Switch threshold	7V/14V 2mA/4mA
electrical Isolation mode	Optocoupler isolation

Output	
Number of channels	16
Output type	The common terminal is 0V
Output current	0.2A
Output protection	Overload protection, overheating protection
Output protection reaction time	approximately 20ms
switching frequency	100HZ
Output voltage drop	0.6V
electrical Isolation mode	Optocoupler isolation

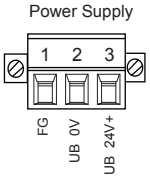
communication interface	
Number of communication interface	2
transmission mode	100Base-TX
Automatic consultation mechanism	YES
Automatic cross-flip	YES
Maximum transmission rate	100Mbit/s
Number of occupied stations	one station（64bit）
Default IPv4 address	192.168.3.*（* Represents the hexadecimal number corresponding to the dial switch）
The IP address setting function	Support for IPAddressSet， port number:61451 （Only network segments can be changed）
Default subnet mask	255.255.255.0
Communication data format	binary system

Operating temperature	0-55 ℃

Communication

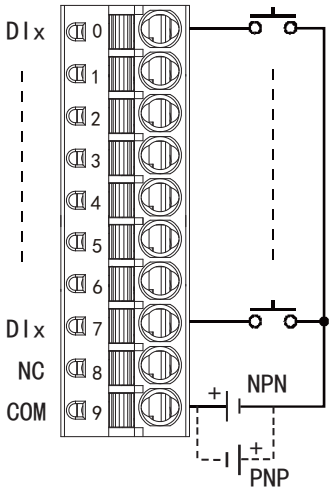
RJ45 pin assignment	RJ45 plug
1. YE 2. OG 3. WH 4. N/C 5. N/C 6. BU 7. N/C 8. N/C	12345678

Power Supply



Note ： UB is the module power supply

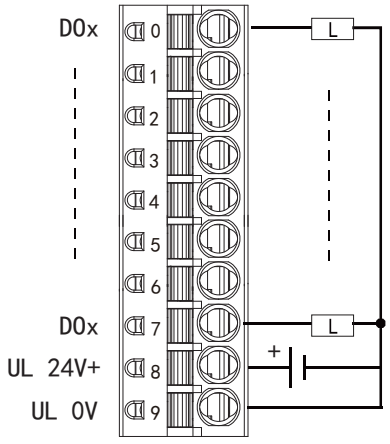
Input terminal



If COM is negative, connect the PNP sensor

If COM is positive , connect the NPN sensor

Output terminal



Note ： UL is the Load power supply

module LEDS Zone： Ⅰ

POWER : Green LED light
ON ： The module power supply (UB) is normal.
RUN : Green LED light
ON : Communication is normal
ERROR ： communication is not established

IN/OUT : This port has two LEDS
Yellow LED light：
ON : Physical connections were established
Flash ： Data exchange
Green LED light：
ON : Communication rate is 100M
OFF ： Communication rate is not 100M

DIx : Yellow LED light
ON : Input active
DOx : Yellow LED light
ON : Input active
NC ： not use
COM ： not use

Module power terminal Zone： Ⅱ

UB+: Module power supply 24VDC positive；
0V : Module power supply 24VDC negative
FG : ground connection

Ethernet interface Zone： Ⅲ

IN : CC-Link IEF Basic BUS In
OUT : CC-Link IEF Basic BUS OUT

IO signal terminal Zone： Ⅳ

DIx :This point is input.
DOx :This point is output.
NC :not use
COM : If COM is negative, connect the PNP sensor
If COM is positive , connect the NPN sensor

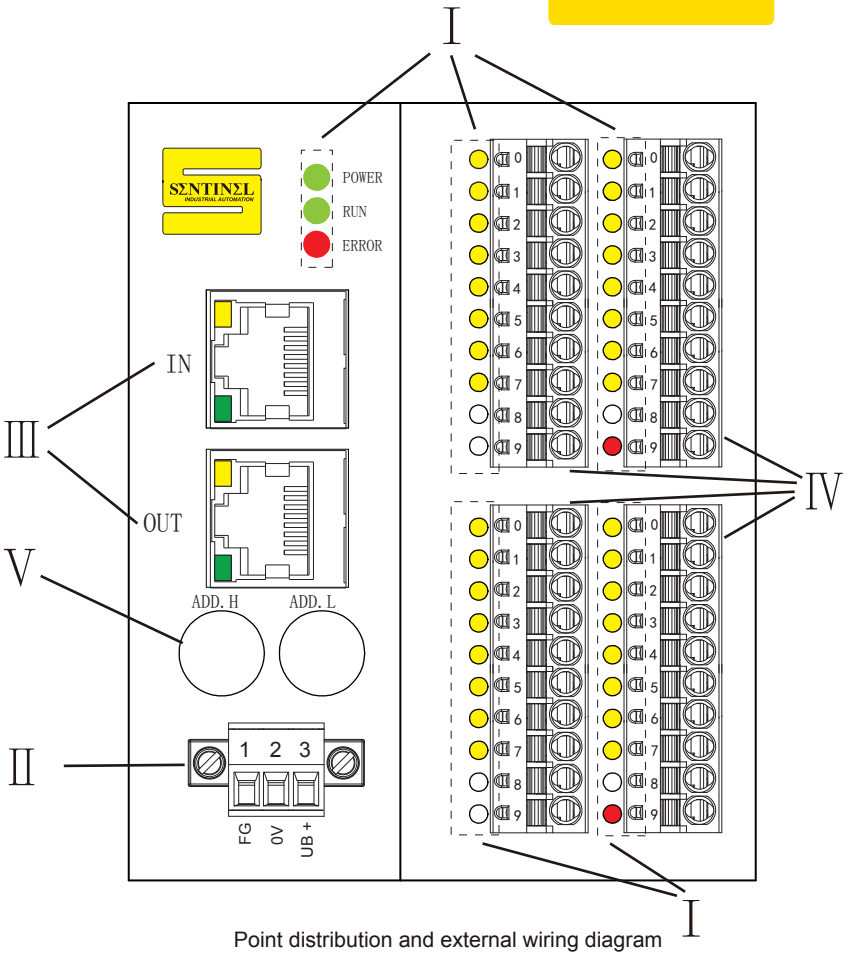
Address dialing Zone： Ⅴ

Default IP address is 192.168.3.* ， * Represents the hexadecimal number corresponding to the dial switch；
ADDR_H is the upper digit of the hexadecimal number of the address
ADDR_L is the lower digit of the hexadecimal number of the address
For example：

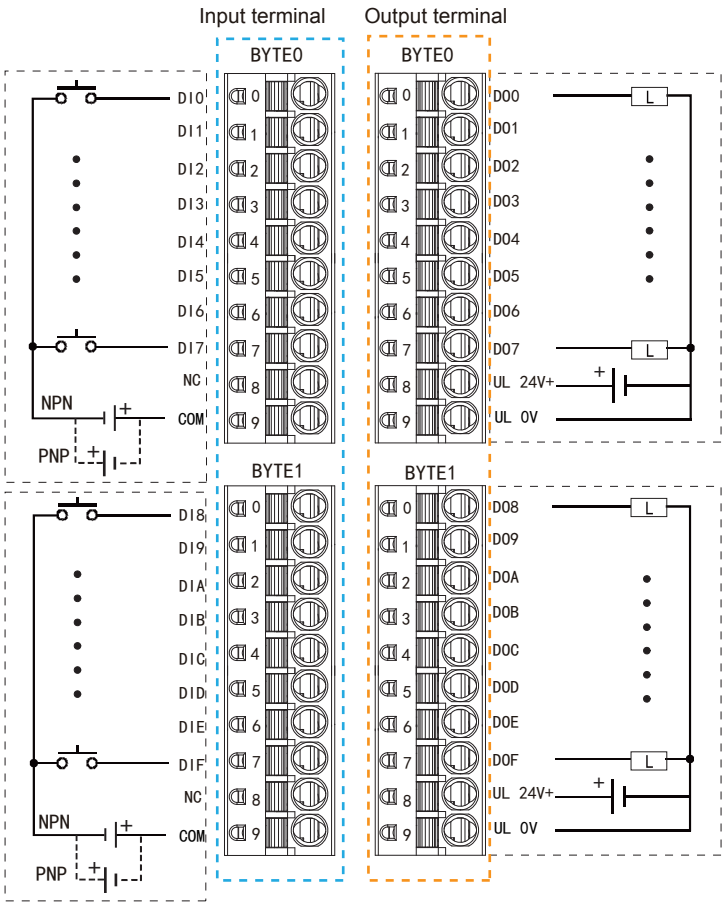
ADDR_H is “A”，ADDR_L is“ 9”，so ADDR is “ 0xA9 ” ，
IP address is：192.168.3.169；

ADDR_H is “2”，ADDR_L is“ 8”，so ADDR is “ 0x28 ” ，
IP address is：192.168.3.40；

Remarks：After the address is changed, it will not take effect until it is powered on again



Point distribution and external wiring diagram



Input point mapping table

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
BYTE0	DI7	DI6	DI5	DI4	DI3	DI2	DI1	DI0
BYTE1	DIF	DIE	DID	DIC	DIB	DIA	DI9	DI8

Output point mapping table

	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
BYTE0	DO7	DO6	DO5	DO4	DO3	DO2	DO1	DO0
BYTE1	DOF	DOE	DOD	DOC	DOB	DOA	DO9	DO8