# Remote I/O module conforming to the *CC-Link IE Field Basic* protocol
# 16 Digital outputs，0.5A per output
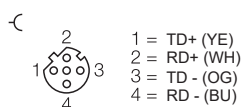
## ELBC-OM16-0001
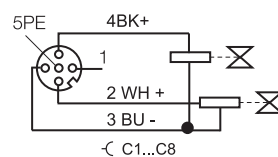
SENTINEL
INDUSTRIAL AUTOMATION



单位：mm
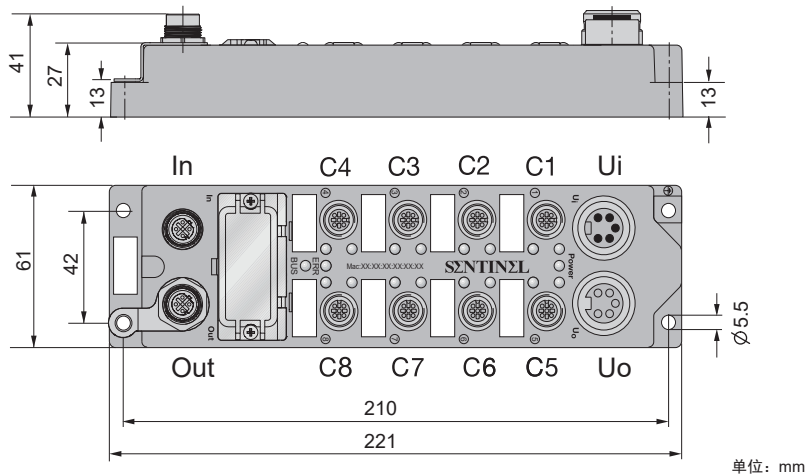
- CC-Link IE Field Basic remote I/O module
- Integrated Ethernet Switch
- Support 100Base-TX
- 2XM12,4-pin,D-code,Ethernet Fieldbus connection
- glass fiber housing
- Impact and vibration resistance
- Fully potted module electronics
- Copper-plated nickel connector
- Protection classes IP67

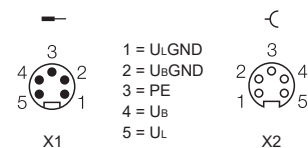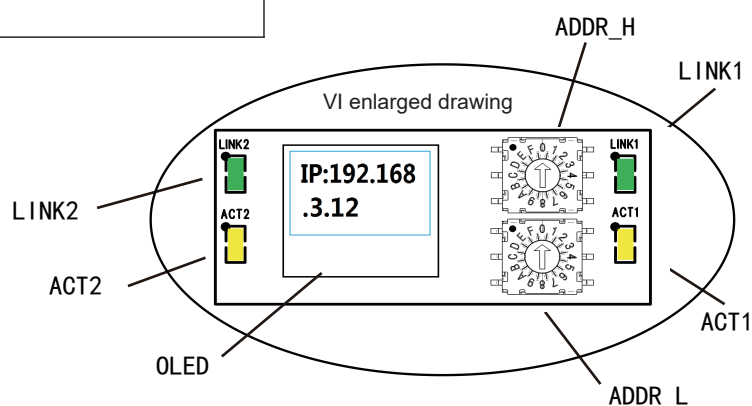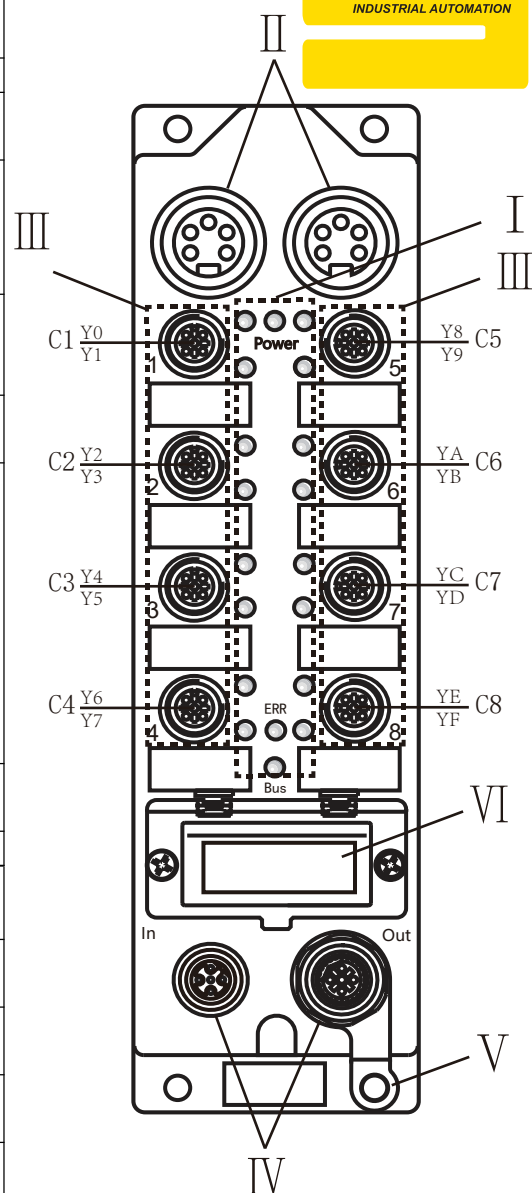| Modle | ELBC-OM16-0001 |
|---|---|
| Supply voltage | 24VDC ± 10% |
| Operating current | < 200mA |
| Current for powering the load | >8A |
| **Output** | |
| Number of channels | 16 |
| Output type | The common terminal is 0V |
| Output current | 0.5A |
| Output protection | Overload protection, overheating 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°C |

### Bus connector  M12



1 = TD+ (YE)
2 = RD+ (WH)
3 = TD - (OG)
4 = RD - (BU)

### Output signal connector  M12



5PE
4BK+
2 WH +
3 BU -
C1...C8

### Power Supply Connector  7/8"



1 = U$_L$GND
2 = U$_B$GND
3 = PE
4 = U$_B$
5 = U$_L$

X1

X2

| | | Description | |
|---|---|---|---|
| | | LED name | Detailed introduction |
| I | module LEDS | Power | Green LED lights: ON:The module power supply (Ub) is normal  OFF:The module power supply is disconnected |
| | | Bus/ERR | Green LED lights on : Communication is normal, and a data exchange has been established  Red LED lights on : Communication was abnormal, and no data exchange was established |
| | | X0 to XF OR Y0 to YF | Yellow LED lights: ON : Input or Output active  OFF: Input or Output inactive  (X : Input , Y : Output) |
| II | power supply | | Ui ( left ) : power suppy input , 7/8'' , 5-pin , male  Uo ( right ) : power suppy output , 7/8'' , 5-pin , female |
| III | Load connection terminals | | M12 A-code 5-pin , female  C * indicates the * th port, X* represents the * bit in the input port, Y* indicates the * bit in the output port  for example： $C1\dfrac{X0}{X1}$ means the C1 port is input，The fourth hole of the port is input X0， the second hole of the port is input X1.  $C8\dfrac{Y6}{Y7}$ means the C8 port is output，The fourth hole of the port is output Y6， the second hole of the port is output Y7. |
| IV | Bus | | In ( left ) : Profinet Bus in , M12 , D-Code , 5-pin , female  Out ( right ) : Profinet Bus out , M12 , D-Code , 5-pin , female |
| V | PE | | ground connection |
| VI | Network status indicator | LINK2 | Bus in , Green LED lights:  ON：This port communication rate is 100M  OFF：This port communication rate is not 100M |
| | | ACT2 | Bus in ,Yellow LED lights：ON：Physical connections have been established  OFF：No connection  Flash：This port has data exchange |
| | | LINK1 | Bus out , Green LED lights:  ON：This port communication rate is 100M  OFF：This port communication rate is not 100M |
| | | ACT1 | Bus in ,Yellow LED lights：ON：Physical connections have been established  OFF：No connection  Flash：This port has data exchange |
| | IP address setting | | 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 |
| | display screen | | OLED display, showing the IP address of the module |



VI enlarged drawing

The C * P * represents the *th pin of the C * port；for example：The C2P2 represents pin 2 of the C2 port；
Y* represents the * th output point in the 16-bit data；for example：The Y8 represents the eighth input point.

| Bit | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Output | YF C8P2 | YE C8P4 | YD C7P2 | YC C7P4 | YB C6P2 | YA C6P4 | Y9 C5P2 | Y8 C5P4 | Y7 C4P2 | Y6 C4P4 | Y5 C3P2 | Y4 C3P4 | Y3 C2P2 | Y2 C2P4 | Y1 C1P2 | Y0 C1P4 |