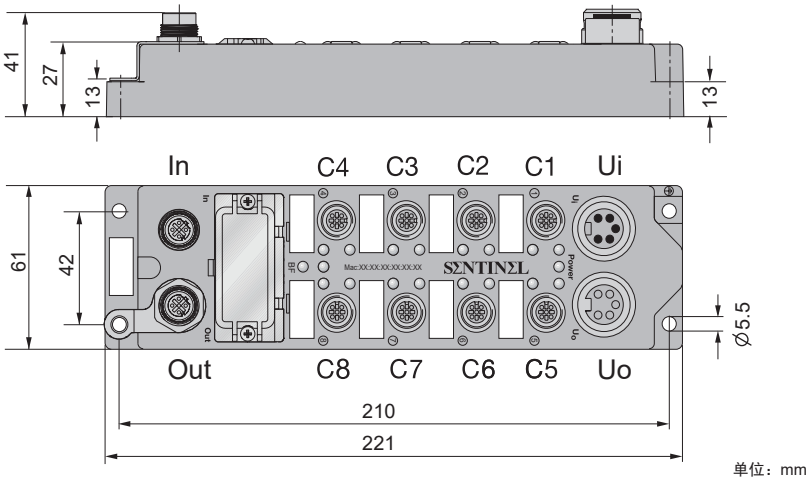
Remote I/O module conforming to the PROFINET INDUSTRIAL ETHERNET protocol

16 Digital PNP inputs

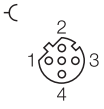
ELPN-IM16-0003



- Profinet 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

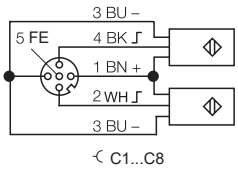
Modle	ELPN-IM16-0003
Supply voltage	24VDC ± 10%
Operating current	< 200mA
Input	
Number of channels	16
Input type	PNP
input impedance	3K
Input rated current	7mA
Input delay	3ms
Switch threshold	2mA/4mA
electrical Isolation mode	Optocoupler isolation
communication interface	
Number of communication interface	2
transmission mode	100Base-TX
Automatic consultation mechanism	YES
Automatic cross-flip	YES
Maximum transmission rate	100Mbit/s
Operating temperature	0-55℃

Bus connector M12



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

Input signal connector M12



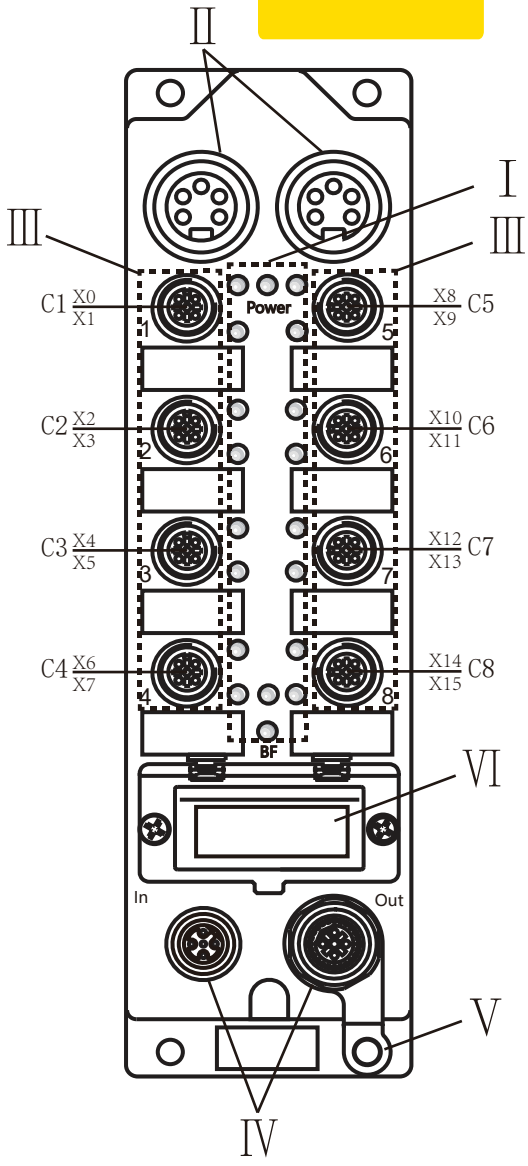
Power Supply Connector 7/8”

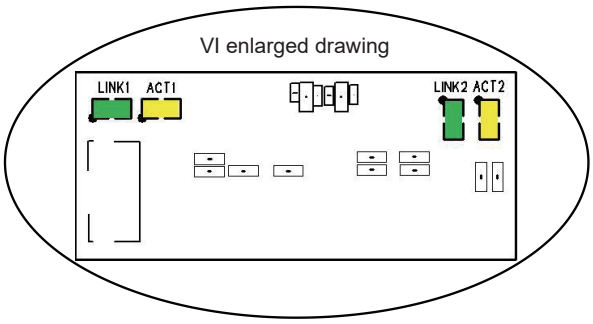


1 = U_LGND
2 = U_BGND
3 = PE
4 = U_B
5 = U_L



		Description	
I	module LEDS	LED name	Detailed introduction
		Power	Green LED lights: ON:The module power supply (Ub) is normal OFF:The module power supply is disconnected
		BF	Red LED lights: ON : BUS no connection. Flashing : The connection is normal,but no communication was established with Profinet I/O Connector. OFF : Communication has been established with Profinet I/O Connector.
		X0 to X15 OR Y0 to Y15	Yellow LED lights: ON : Input or Output active OFF: Input or Output inactive (X : Input , Y : Output)
II	power suppy	Ui (left) : power suppy input , 7/8", 5-pin , male Uo (right) : power suppy output , 7/8", 5-pin , female	
III	Load connec-tion 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: $C1\frac{X0}{X1}$ means the C1 port is input, The fourth hole of the port is input X0, the second hole of the port is input X1. $C8\frac{Y6}{Y7}$ 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	LINK1	Bus in , Green LED lights: ON : This port establishes a physical connection. OFF: No connection is established on this port
		ACT1	Bus in ,Yellow LED lights: ON : This port has data exchange; OFF: There is no data exchange for this port
		LINK2	Bus out , Green LED lights: ON : This port establishes a physical connection. OFF: No connection is established on this port
		ACT2	Bus out , Yellow LED lights: ON : This port has data exchange; OFF: There is no data exchange for this port





The C * P * represents the *th pin of the C * port; for example: The C2P2 represents pin 2 of the C2 port;
X * represents the * th input point in the 16-bit data; for example: The X8 represents the eighth input point.

	BYTE	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Inputs	0	X7 C4P2	X6 C4P4	X5 C3P2	X4 C3P4	X3 C2P2	X2 C2P4	X1 C1P2	X0 C1P4
	1	X15 C8P2	X14 C8P4	X13 C7P2	X12 C7P4	X11 C6P2	X10 C6P4	X9 C5P2	X8 C5P4