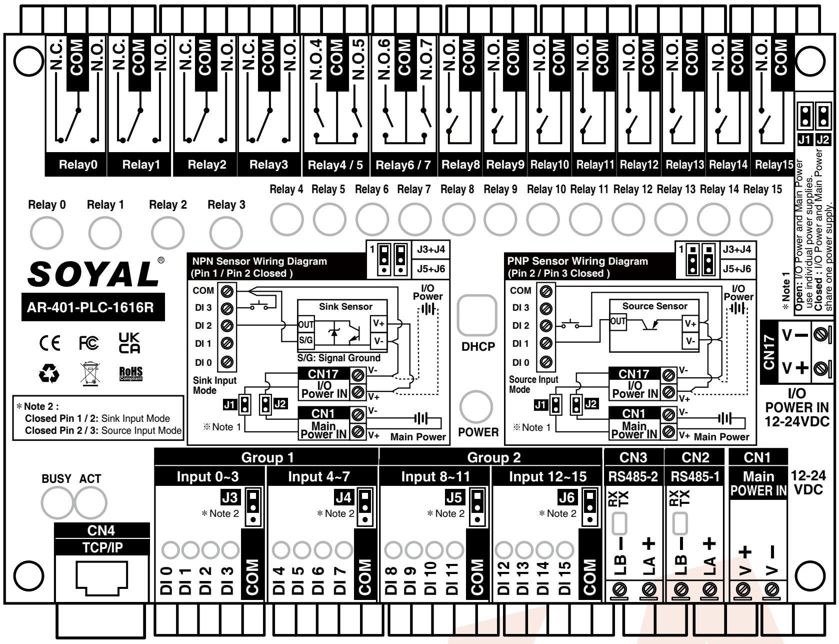
Programmable Logic Controller(WEB PLC)

AR-401-PLC-1616R



1. Product Features

- Built-in HTTP server allows direct programming through a web page using a browser,eliminating the need for a human-machine interface..
- Added unique intelligent building logic scheduling functionality, greatly simplifying automatic management configuration for large buildings.
- Input point events can proactively notify the cloud monitoring system via TCP and automatically execute offline emergency linkage processes.
- Equipped with Perpetual Calendar Time, Holiday Conditions,Counters, Timers, and DI/DO Edge Trigger Conditions

3. How to Order

AR-401-PLC | **1616** | **R** | **X** | **-X**

Input Qty / Output Qty
0808 = 8 Input & 8 Output
1616 = 16 Input & 16 Output

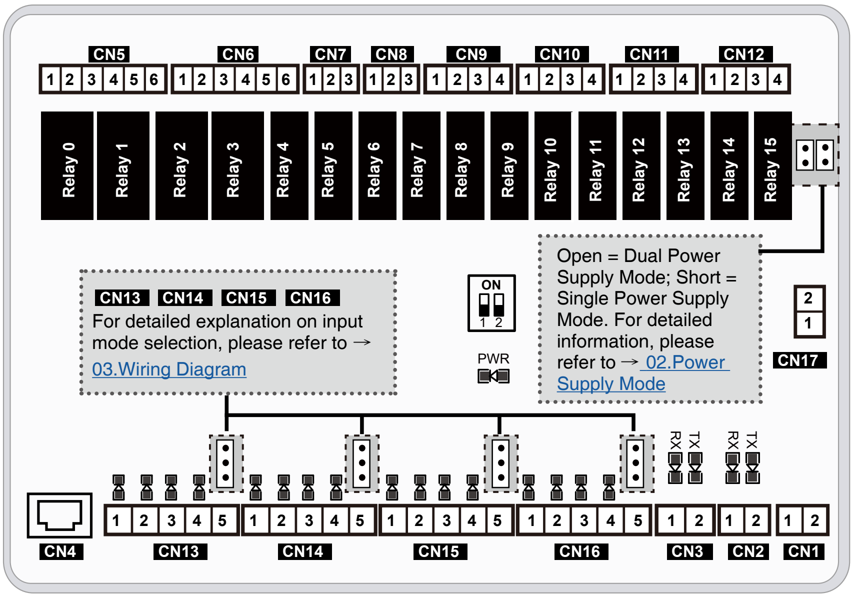
Relay
R = Relay

Type
N/A = PCB
M = Metal Case
X = Plastic Mounting Base

Additional Module
N/A = No Additional Module
P = POE Features

Table of Contents

01.PIN Assignments



CN1

Function	Pin	Description
Main power input (single power supply mode) (DC12~24V/1W)	1	V+
	2	V-

CN2

Function	Pin	Description
External port 1 (RS-485 input)	1	L1-(B-)
	2	L1+(A+)

CN3

Function	Pin	Description
External port 2 (RS-485 input)	1	L2-(B-)
	2	L2+(A+)

CN4

Function	Description
TCP/IP	TCP/IP

CN17

Function	Pin	Description
I/O power supply (DC12~24V/1W)	1	V+
	2	V-

※ Note : It is recommended not to share with the main power supply.

CN9~12

Function	Pin	Description
Relay output 8~15	1	N.O.
	2	COM

CN13

Function	Pin	Description
DI input	1	DI.0
	2	DI.1
	3	DI.2
	4	DI.3
	5	COM

CN14

Function	Pin	Description
DI input	1	DI.4
	2	DI.5
	3	DI.6
	4	DI.7
	5	COM

CN15

Function	Pin	Description
DI input	1	DI.8
	2	DI.9
	3	DI.10
	4	DI.11
	5	COM

CN16

Function	Pin	Description
DI input	1	DI.12
	2	DI.13
	3	DI.14
	4	DI.15
	5	COM

CN5~6

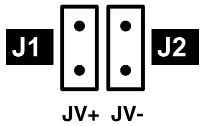
Function	Pin	Description
Relay output 0~3	1	N.C.
	2	COM
	3	N.O.
	4	N.C.
	5	COM
	6	N.O.

CN7~8

Function	Pin	Description	
		CN7	CN8
Relay output 4~7	1	N.O.4	N.O.6
	2	COM	COM
	3	N.O.5	N.O.7

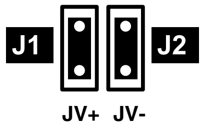
02.Power Supply Mode

- **I/O Power and Main Power Use Separate Power Supplies (JV+ & JV- Open):**
  Two separate power supplies are required. In this mode, the main controller and I/O operate in a power isolation mode, enhancing system safety and reliability. The power supply range is 12~24V.



＊JV+ & JV- both do not plug in jumper

- **I/O Power and Main Power Share the Same Power Supply (JV+ & JV- Shorted):**
  Only one power supply is needed, simplifying installation in environments where I/O power isolation is not required. In this mode, the power input provides 12~24V.



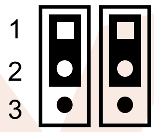
＊JV+ & JV- both plug in jumper

03.Wiring Diagram

NPN Sensor Wiring Diagram

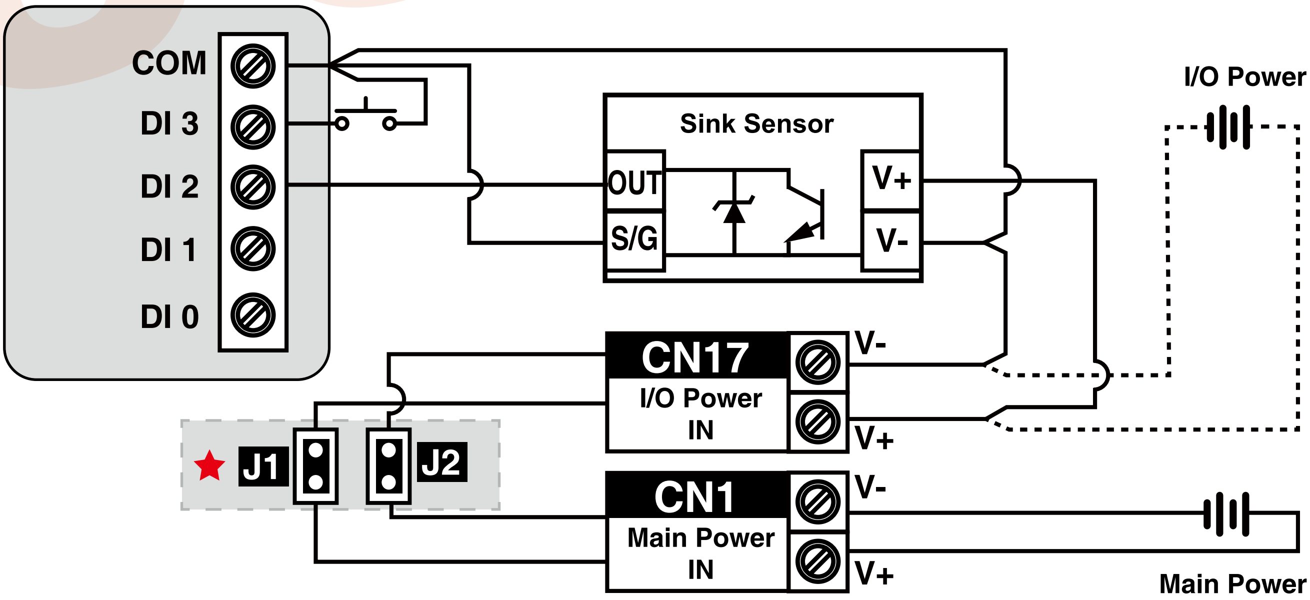
Jumper Configuration Method ：

1. PIN 1/ PIN 2 Must Insert Jumper
2. Synchronize adjustments in pairs, with Jumper J3+J4 as one group and Jumper J5+J6 as another group.

	Jumper J3+J4 as one group	Jumper J5+J6 as one group

Sink Input Mode : When receiving a low-level signal to trigger the DI point, the CN17 I/O power and the grounded sensor must share the same power source. The DI COM point should be connected to the V- of the sensor.

AR-401-PLC-1616R
Sink Input Mode

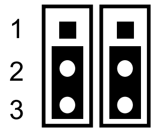


★ Select Independent Power Supplies or Shared Power Supply:
For detailed information, please refer to →02.Power Supply Mode

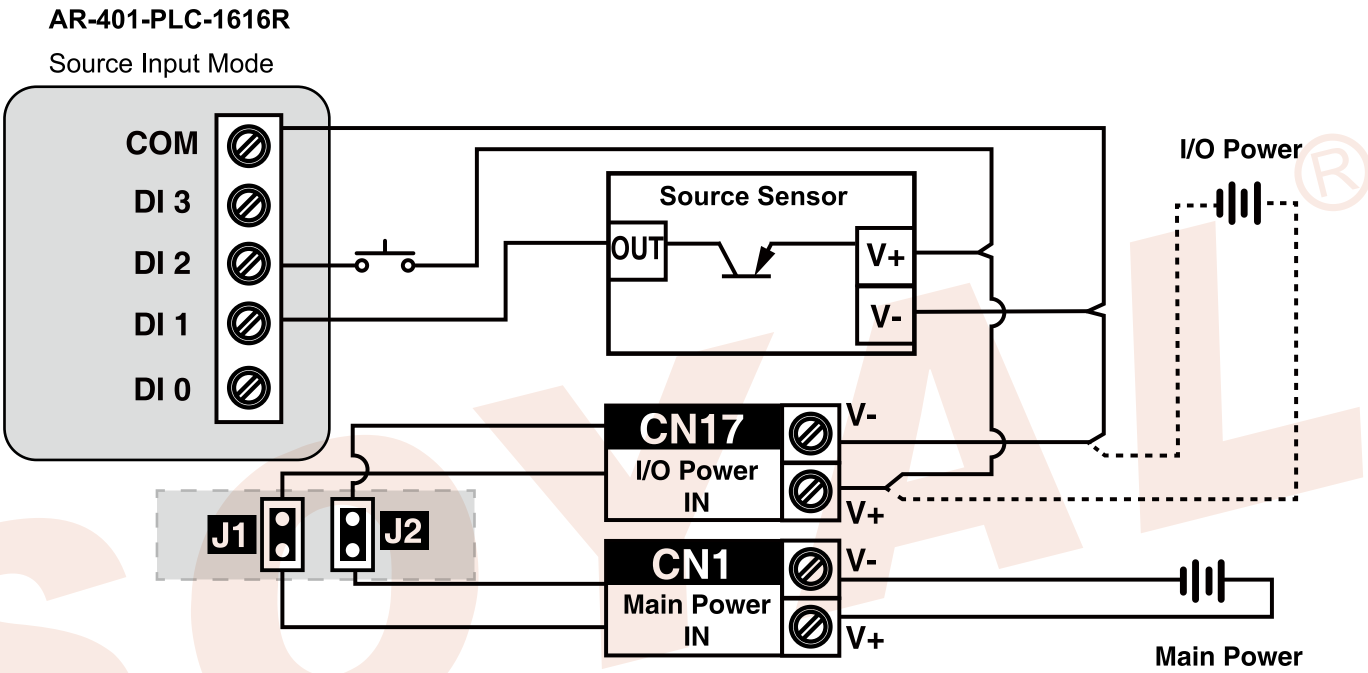
PNP Sensor Wiring Diagram

Jumper Configuration Method ：

1. PIN 2/ PIN 3 Must Insert Jumper
2. Synchronize adjustments in pairs, with Jumper J3+J4 as one group and Jumper J5+J6 as another group.

	Jumper J3+J4 as one group	Jumper J5+J6 as one group

Source Input Mode: When receiving a V+ power signal to trigger the DI point, the CN17 I/O power and the powered sensor must share the same power source. The DI COM should be connected to the V- of the sensor.



★ Select Independent Power Supplies or Shared Power Supply:
For detailed information, please refer to →02.Power Supply Mode

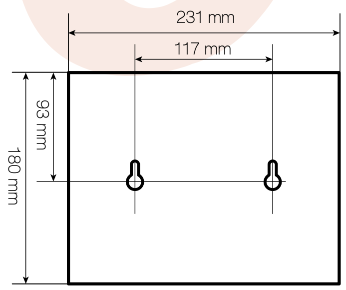
04. DHCP DIP Switch Configuration

DIP Switch Number	Function Description	Enable / Disable		DIP Switch Diagram
2	**DHCP** (Auto IP Address Configuration)	ON	Enable	ON 1 2
		OFF	Disable	ON 1 2
1	**IP address broadcast to external**	ON	Enable (Channel 1 will continuously transmit the controller's IP address)	ON 1 2
		OFF	Disable	ON 1 2

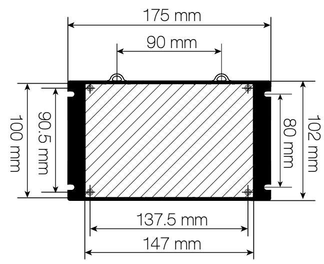
05.Specification

Interface	Serial port	RS485 X 2
	Baud Rate	4800 bps -115200 bps
Input/Output		16 Isolated Input / 16 Relay Output - 4 Form C / 12 Form A (250VAC /30VDC/4A)
Protocol		ModBus-TCP, ARP, IP, TCP Client,UDP, ICMP, HTTP, DHCP, NetBIOS
LED Indicator		Power,Tx/Rx, D.O./D.I
Watchdog function		Yes
Operating Temperature		-20℃ ~ +70℃
Fuses		Power & RS485 both with PTC Protector
Noise Isolation		Input optical isolation
Power Supply		12-24 VDC
Power Consumption		<2W
Dimension(mm)		PCB:100(H)x147(W)x20(D) Panel Mounting Base :102(H)x175(W)x30(D) Metal Box :180(H)x231(W)x62(D)
Weight(g)		PCB: approx.150 Panel Mounting Base : approx. 240 Metal Box : approx.1760

06.Installation



Metal casing



■ DIN rail mounting base ▨ PCB

07.Contents

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