

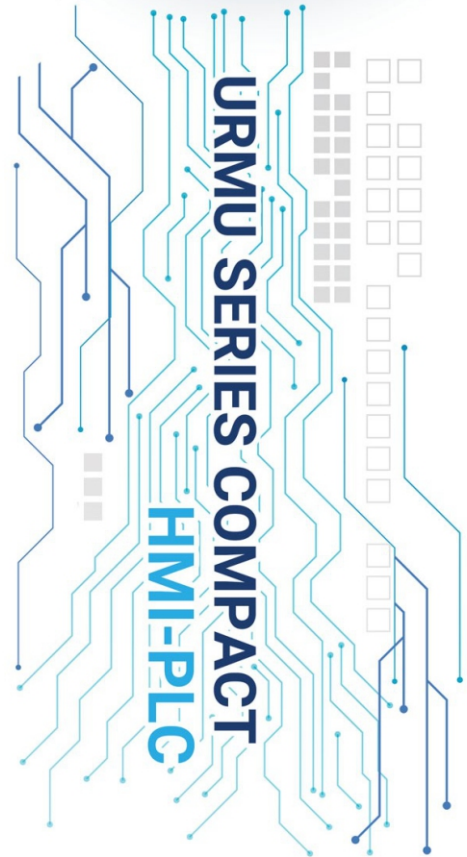


Programmable Logic Controller

- PLC Software is OTAZ STUDIO
- Have 12 high speed input (50KHz)
- Have 10 high speed output (50KHz)
- Support 2 Analog Input (0~10V OR 0~20mA)
- Support 2 Analog Output (0~10V OR 0~20mA)
- Support 1 TC/RTD Temperature sensor
- Have 2 Rs232 serial port for communication
- Have 1 Rs485 serial port for communication
- Support expansion module
- Available in two types of transistor OR relay
- Available in two types of 220VAC OR 24VDC

Human Interface Machine

- Designable Screen with URMU DESIGNER Software
- Display is 128x64 monochromic graphic LCD
- Have 8 function key
- Have status LED
- Have arrow key for setting
- Very easy to use





Thank you for purchasing **OTAZ** HMI-PLC. Before installing or operating the unit, please read this installation guide carefully to ensure correct use.

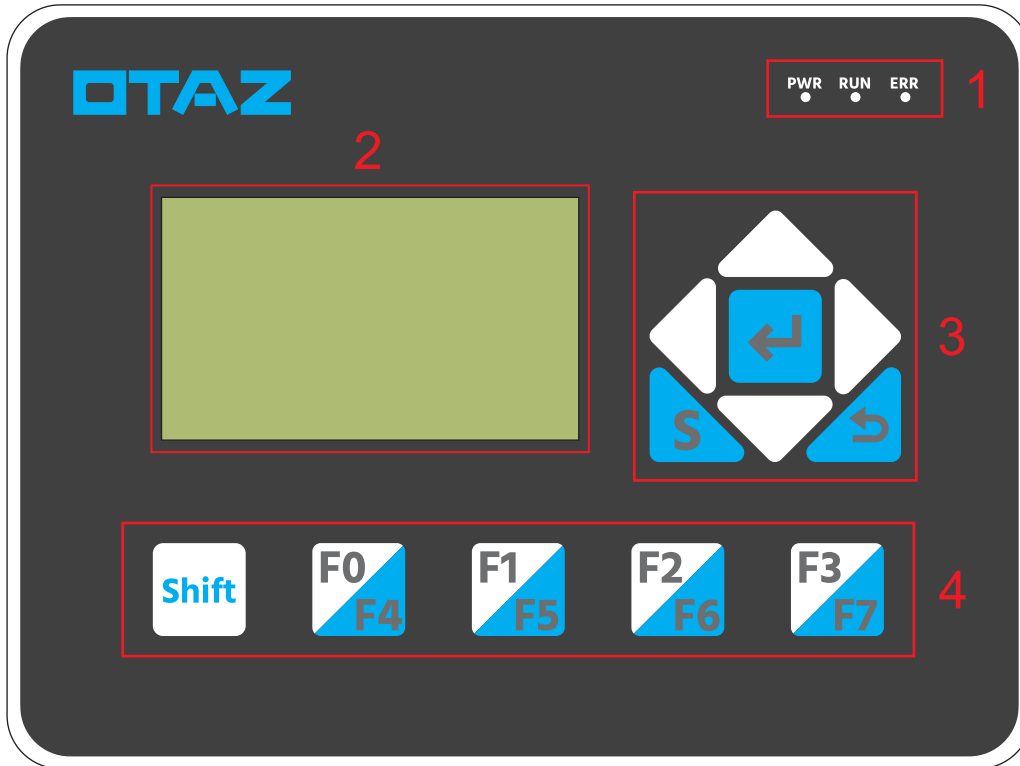
Safety Precautions (Read these precautions before use.)

General

- Unpack and check the delivery for transportation damage. If any damage or deformation is found, please notify the supplier.
- The supplier is not responsible for the disassembled, altered or modified device.
- Never allow fluid or any conductive particles to enter into the HMI. Otherwise, it may damage the HMI, cause fire or malfunction.
- Only qualified personnel may install the HMI, perform maintenance and inspection.
- The liquid crystal inside the LCD panel is a hazardous substance. If the panel is damaged, avoid contact with the leaked liquid crystal. If the liquid crystal spills on clothing or skin, use soap and wash off thoroughly. In case of eye contact the liquid, hold the eye open, flush with plenty water and get medical attention as soon as possible.
- Do not touch any terminals while the power is on. Otherwise, it may cause injury due to electrical shock.
- Disconnect the power supply before installing the HMI, do wiring operation, perform maintenance or inspection. Otherwise, it may cause damage or electrical shock.

Installation

- The installation may be carried out by qualified personnel only.
- Install the HMI according to the installation procedures.
- Check the power source voltage is within the specified range and the polarity is correct before connecting the HMI.
- Keep signal and power supply cables away from high-voltage, large-current carrying cables.



1. State LED

PWR: Power is OK
 RUN: PLC status (run/stop)
 ERR: Error

2. LCD display

Graphic LCD (128x64)

* Can be used in the program(S--)

- Buzzer (S37)
- Back light (S38)

4. Function button

* Can be used in the program(S--)

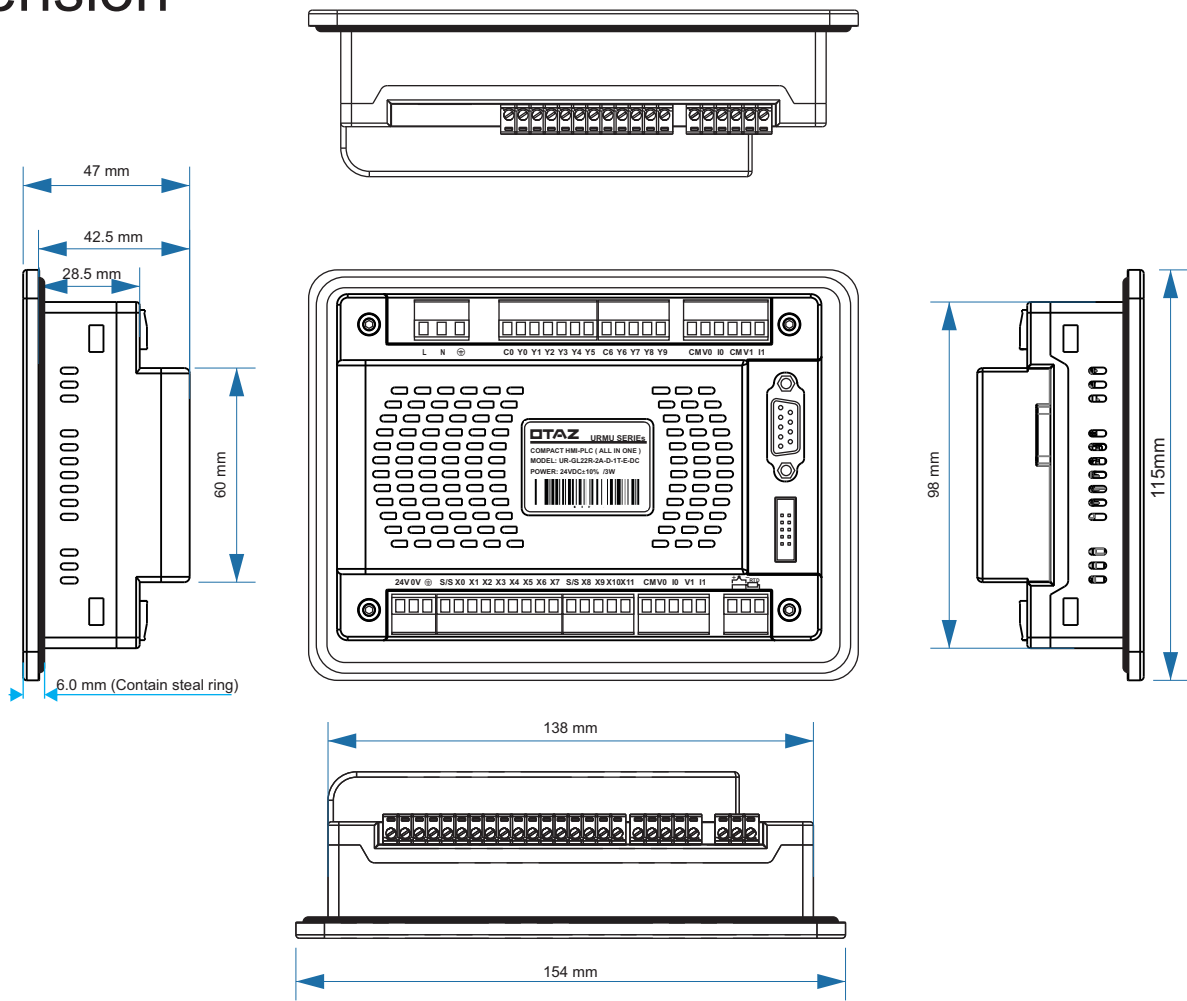
- Shift button (S21)
- F0 button (S22)
- F1 button (S23)
- F2 button (S24)
- F3 button (S25)
- F4 button (S26)
- F5 button (S27)
- F6 button (S28)
- F7 button (S29)

3. Control button

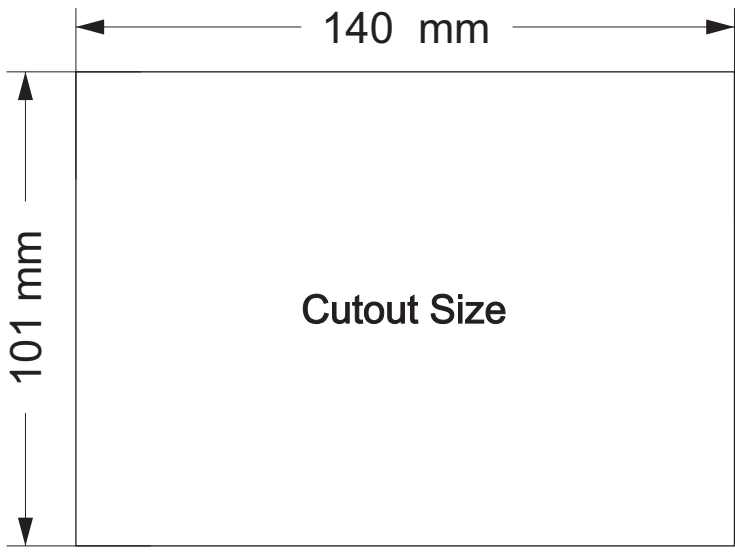
* Can be used in the program(S--)

- Enter button (S30)
- Up button (S31)
- Down button (S32)
- Left button (S33)
- Right button (S34)
- Show I/O status (S35)
- Back button (S36)

Dimension



Installation Procedures



- Push the HMI into the cutout until the waterproofing ring contacts the plate.
- Insert a hook into each mounting hole on the HMI, and then tighten the screws evenly with a moderate torque.
- Failure to tighten the screws may cause the HMI to fall, malfunction or short-circuit. Excessive tightening may cause deformation. The necessary torque is about 0.16N·m.

Wiring the 220VAC version

MODEL: UR-GLxxx-xA-xD-xx-x-AC
 POWER: 185-265VAC/30W

Power supply

- Output: 24VDC/300mA

Digital Input's

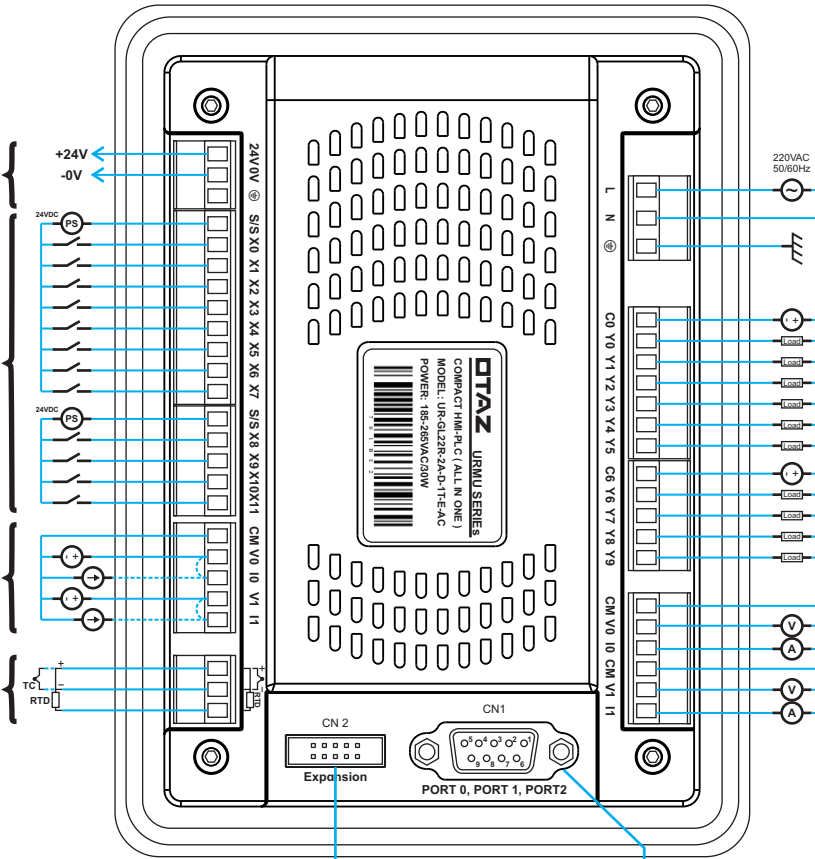
- All inputs are high speed(50KHz)
- inputs have the ability to interrupt
- Input type: Sink / Source
- Photocouple isolation
- Support encoder (AB, Pulse/Dir,...)

Analog Input's

- 12bit resolution
- Input range 0V~+10V / 0mA~+20mA
- Non isolated

Temperature input

- Resolution :0.1°C
- Input type: Thermocouple / RTD
- Photocouple isolation



Ac voltage input

225VAC/200mA
 +-10%

Digital output's

- All outputs are high speed(50KHz)
- output type: Sink
- Photocouple isolation

Analog output's

- 12bit resolution
- Input range 0V~+10V / 0mA~+20mA
- Non isolated

Expansion port

Communication

Pin-out of COM Ports

DB-9 Female Connector			
PIN#	PORT0 [RS-232]	PORT1 [RS-232]	PORT2 [RS-485]
1	—	—	DATA+
2	TX	—	—
3	RX	—	—
4	—	—	—
5	GND	GND	GND
6	—	—	DATA-
7	—	RX	—
8	—	TX	—
9	—	—	—

Wiring the 24VDC version

MODEL: UR-GLxxx-xA-xD-xx-x-DC

POWER: 24VDC/3W ±10%

Power supply

- Input: 24VDC/3W

Digital Input's

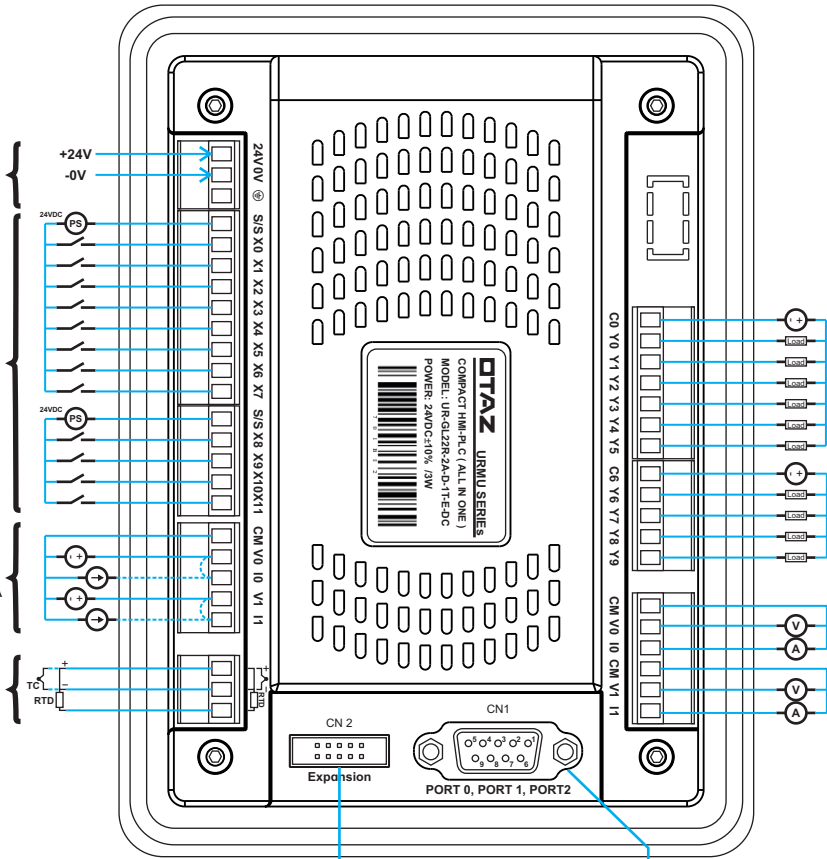
- All inputs are high speed(50KHz)
- inputs have the ability to interrupt
- Input type: Sink / Source
- Photocouple isolation
- Support encoder (AB, Pulse/Dir,...)

Analog Input's

- 12bit resolution
- Input range 0V~+10V / 0mA~+20mA
- Non isolated

Temperature input

- Resolution :0.1°C
- Input type: Thermocouple / RTD
- Photocouple isolation



Digital output's

- All outputs are high speed(50KHz)
- output type: Sink
- Photocouple isolation

Analog output's

- 12bit resolution
- Input range 0V~+10V / 0mA~+20mA
- Non isolated

Expansion port

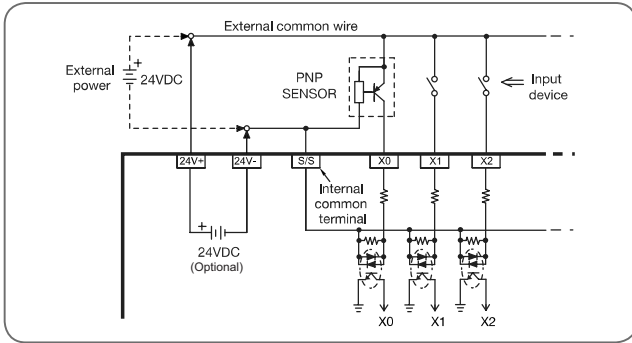
Communication

Pin-out of COM Ports

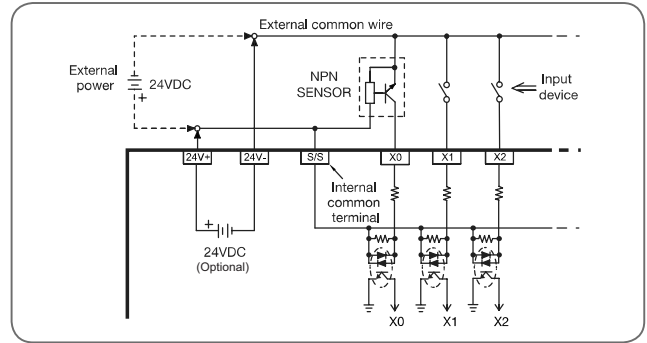
DB-9 Female Connector			
PIN#	PORT0 [RS-232]	PORT1 [RS-232]	PORT2 [RS-485]
1	—	—	DATA+
2	TX	—	—
3	RX	—	—
4	—	—	—
5	GND	GND	GND
6	—	—	DATA-
7	—	RX	—
8	—	TX	—
9	—	—	—

Digital input's

Wiring of 24VDC single-end SOURCE input

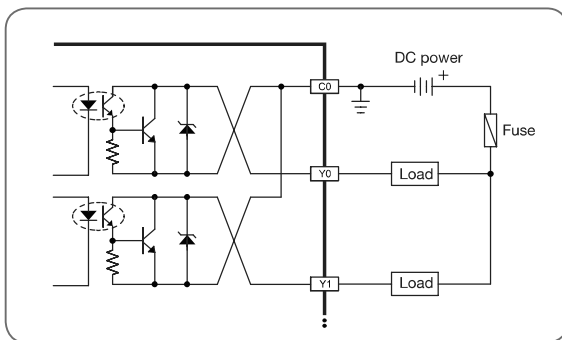


Wiring of 24VDC single-end SINK input

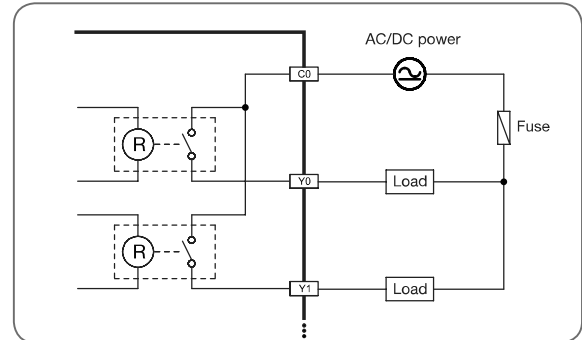


Digital output's

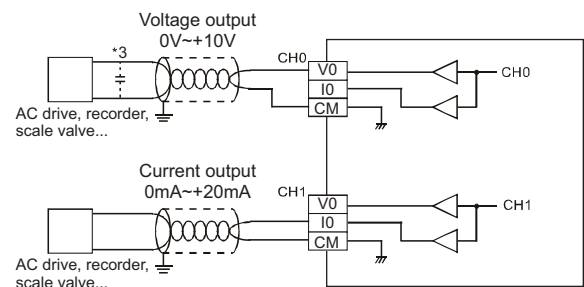
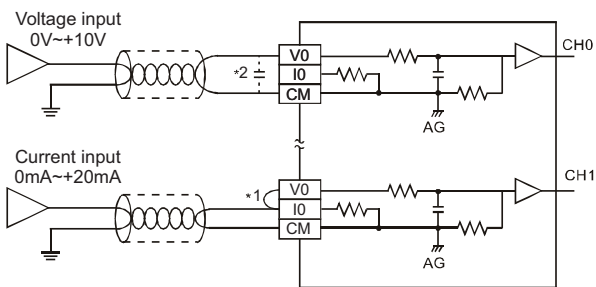
Wiring of transistor single-end SINK output



Wiring of relay single-end output



Analog I/O



Note 1: If input signal is in current, please short out between V0 and I0 terminals.

Note 2: If the noise interference from loaded input wiring terminal is significant, please connect a capacitor with 0.1~0.47μF 25V for noise filtering

Note 3: If the noise interference from loaded input wiring terminal is significant, please connect a capacitor with 0.1~0.47μF 25V for noise filtering.