

OP320-A(-S/-N)

Fast reference manual

【Installation Guide】

<1> Environmental Requirement

- Dry and no condensation.
- Far from corrosive gas and dusts.
- Don't install the unit in somewhere with liquid or chemicals.

<2> Wiring

- Far from the power supply or cable with high current or high voltage.
- Never over voltage; Make sure the polarity of power supply is correct.
- The cable connection should be right.

<3> Cleaning

- Product cover will be eroded by strong acid, alkali and organic liquor.

【General Specifications】

- Input Voltage: DC22 - 26V
- Power Consumption: $\leq 4W$
- Power off allowable: less than 20ms
- Withstand Voltage: AC1000V-10mA less than 1 minute
- Operation Temperature: $0 \sim 50^{\circ}C$
- Storage Temperature: $-10 \sim 60^{\circ}C$
- Ambient Humidity: $20 \sim 85\%$ (no condensation)
- Anti-jamming: 1000Vp-p, pulse period 1ms, duration 1 minute
- Protection Structure: IP65F
- Cooling method: natural cooling
- Ambience: without corrosive gas and liquid
- Download port: RS232
- Communication port: RS232/RS422(OP320-A), RS232/RS485(OP320-A-S), RS232(OP320-A-N)

【Functions and Advantages】

Resolution: 192×64 pixels

Display: 3.7" monochrome STN LCD with backlight

Screen Edit: Touchwin software, easy to learn

Buttons: 20 buttons can be set to different functions, replace some buttons on the control cabinet

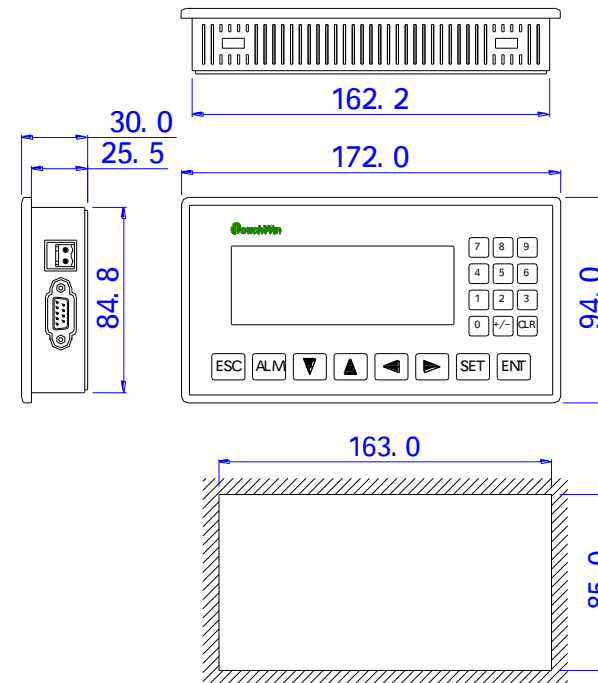
Communication: Communicate with various PLCs, such as Siemens, Mitsubishi, Koyo, Omron etc.

Special Functions: Alarm list, dynamic text, password

【Installation】

<1> External Dimensions

Unit: mm



This mounting dimension is for your reference, please increase 0~0.5mm for actual needs.

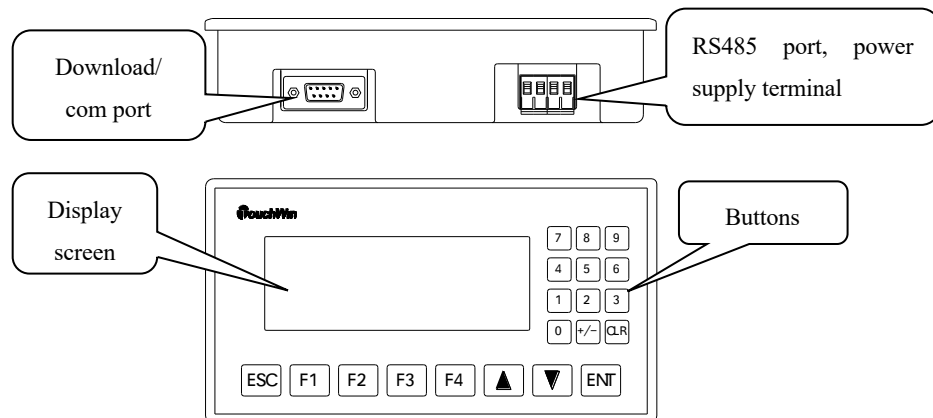
<2> Fix the product

- Put the products into the mounting hole.
- insert the fixed brackets into the mounting holes, then tighten the screw.

Notes: --The screw should be vertical to the frontal panel.

--Screwing force should be moderate, or it will damage the cover of the product.

【Connections】



--Power supply: DC24V

--download/com port: download and communication port (RS232/RS422/RS485)

【Pin name of Com/download port】

<1>Download /com Port

OP320-A		OP320 -A-S		OP320-A-N	
Pin no.	Function	Pin no.	Function	Pin no.	Function
Pin1	TD+	Pin1	TD+	Pin1	
Pin2	RXD	Pin2	RXD	Pin2	RXD
Pin3	TXD	Pin3	TXD	Pin3	TXD
Pin4		Pin4		Pin4	
Pin5	GND	Pin5	GND	Pin5	GND
Pin6	TD-	Pin6	TD-	Pin6	
Pin7	RTS	Pin7	RTS	Pin7	RTS
Pin8	RDD-	Pin8	B	Pin8	
Pin9	RDD+	Pin9	A	Pin9	

<2> Connections of Download Cable

OP320-A (-S/-N)


2	RXD
3	TXD
5	GND
7	RTS

PC

2	RXD
3	TXD
5	GND
7	CTS

【Download And Communications】

<1> Build a New Project


Run the software, click “”; Choose PLC type.

<2> Edit the Screen

--Please refer to OP Manual.

<3> Download Screen Data

--Connect the download cable correctly and turn on the power.

--Click”“; wait until download successfully.

<4> Communicate With PLC

--Connect with cables correctly, and then it will exchange data with PLC.

Notes: --For the detailed using method, please refer to the manual.

--Communication cables are supplied by us or made by yourself as the connection diagram.

【Q&A】

Phenomenon	Possible reason	Solutions
The displaying color is abnormal	Environmental temperature $>50^{\circ}\text{C}$ or $<0^{\circ}\text{C}$	Adjust the contrast; Try to decrease the ambient temperature
Can not Download	Cable is unsuitable; Serial port is abnormal	Use the correct cable and connect the MP with the computer correctly
Can not communicate	PLC type is incorrect; Something is wrong with the cable; The communication parameters are wrong	Choose the right type of PLC; Ensure the correctness of cables ; Set the correct communication parameters
Sometimes no display or communication abnormal with the buzzer ringing	Strong interference source exists nearby	Correct wiring ,take actions as shielding , insulation and so on