

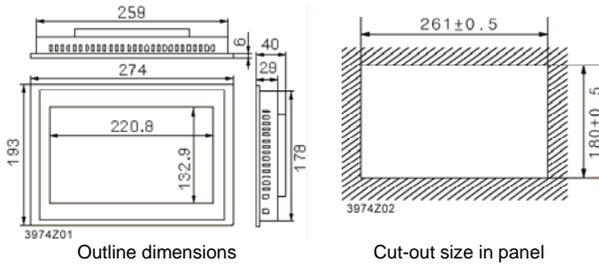


QAX160 Touch Panel (V2)

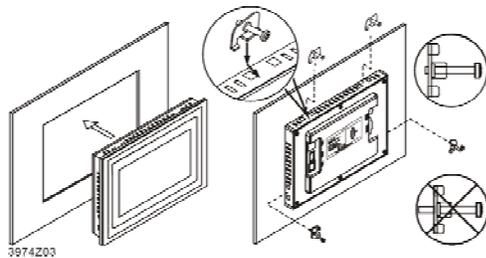
— for smart monitoring system

1 Installation

1.1 Dimensions (unit: mm)



1.2 Mounting instruction

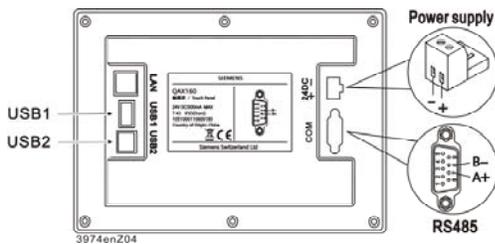


2 Product maintenance

2.1 Battery replacement

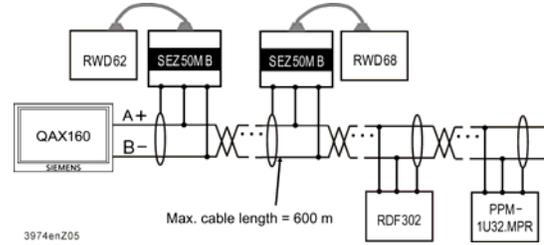
Battery position: Open the back cover to find the button cell in the circuit
 Battery specification: CR2032 3 V Lithium battery

2.2 External interfaces



- Note:**
- USB1 can connect to either keyboard or mouse
 - USB2 is for factory maintenance only
 - Terminated resistor of bus (If needed): Open back cover, connect jumper 2 with jumper 3 (J400)
 - LAN interface is not available

3 Devices combination and application



3.1 Devices supported

Devices	Type	Order number
RWD62	Universal controller	RWD62
RWD68	Universal controller	RWD68
RDF302	Room unit (Modbus)	S55770-T238
SEZ50MB	RWD Modbus interface module	S55370-C120
QAX160	Centralized touch panel	S55620-H100
PPM-1U32.MPR	Remote I/O extension module	S55664-J111

3.2 Applications supported

	AHU	HEX	DPE
RWD68	#10, #14 #20, #24 #40, #44 #50, #54, #56 #60, #64	#20, #24 #40, #44 #50, #54, #56	#40
RWD62	#10, #14, #16 #30, #34 #40, #44	#10, #14, #16 #30, #34	#40
RDF302	FCU		
PPM-1U32.MPR	I/O		
	#0, #5		

4 Main features

Product features	Size	10.2 inches
	Touch panel	TFT LCD, LED backlight
	Display color	65535 true color
	Resolution	800 x 480 pixels
	Screen brightness	200 cd/m ²
	Power supply	DC 24 V
	Rated power	15 W
	CPU mainboard	ARM CPU, 400 MHz
Environment	RAM	64 M
	Storage device	128 M FLASH
	Operating temperature	0°C to 45°C
Environment	Operating humidity	5% to 90% RH
	Storage temperature	-10°C to 60°C
Interfaces	RS485	9600 bps, Modbus RTU, no parity
	USB	Master and Slave
	Ethernet	Not supported
Certifications	Certification	CE
	Protection class	IP65 (front panel)

5 Product operation



5.1 User management

QAX160 supports **PowerUser** and **User**, operator can click the **Login** button to log in as a different user. Power user is password-protected, which can be modified by clicking **Change PWD** button on page 3. The default password is 123456.

Power user is permitted to perform advanced operations, such as system configuration, time schedule setting, and each device data configuration. Power user should remember to log off after such operations for security.

5.2 System configuration

- QAX160 supports free definition of project name (page 3). Max. length of project name is 16 Chinese characters or 32 English characters.
- 30 slave devices max. are supported by QAX160, device addresses are set as 1 to 30. Click the **Edit** button at each device line on page 3 to configure **Address**, **Application type**, **Device Type**, **Device Description** and **Application Number** *. Next, click the **Save** button to finish the configuration for individual device.

E.g., One RWD68 controls an AHU on a certain building's second floor, the application number of RWD68 is #10, and the Modbus address is 1, thus the configuration for this device could be as below:

Device List	Address	Application Type	Device Type	Device Description	Application Number
DEVICE1:	1	AHU	RWD68	F2-AHU	10

- After the system configuration is complete, click the **Save&Exit** button at the right bottom corner on page 3 to save the system configuration and return to page 1. All the configured devices can be displayed by means of blocks**.

Note:

* For device types and application numbers corresponding to devices supported by QAX160, refer to chapter 3.2. Quick linkage to online help is available via **Help Document** in the bottom of Page 3.

** If a certain device block cannot be displayed on page 1 after system configuration, user should try to make sure the device address is not set to 0.

5.3 Individual device plant view

Click individual device blocks on page 1 to enter the corresponding application plant view (E.g., page 4). If page 4 cannot be entered, check if the configuration of individual device strictly conforms to the restrictions described in chapter 3.2.

Normal user can only monitor the device status and change the set point. Clicking the **Local Config** button on page 4 can quickly login or logout as power user can implement the following modifications:

- Set point and alarm ranges of control variables of RWD and RDF302
- Channel name definition and output status switch of PPM-1U32.MPR
- Channel name definition and channel logic/delay time programming for application 5 of PPM-1U32.MPR

Note:

- Short circuit (1) of digital input is displayed with green lamp texted as "Close"
- Open circuit (0) of digital input is displayed with red lamp texted as "Open"
- Energized (1) relay of digital output is displayed with green lamp texted as "On"
- De-energized (0) relay of digital output is displayed with red lamp texted as "Off".

5.4 Language

Use button at the right bottom of either page 1 or page 3 to change QAX160 display languages. Both Chinese and English are supported.

5.5 Time schedules

The time schedule program (page 6) can be entered by clicking **Schedule** button. QAX160 supports 3 individual schedules.

Programming items for each time schedule are shown as below:

- ON/OFF button at the top of the page to enable/disable time schedule
- To set day/night temperature for RWD62, RWD68 and RDF302, or day/night output status for PPM-1U32.MPR
- To set the weekly day/night starting time. The start time setup range is from 0 to 23. The Min. time interval is 1 hour. When the start time is set to 24, then the time setup is invalid.
- To select device for time schedule setup. Currently time schedule 01 and 02 only support configured RWD62, RWD68 and RDF302; time schedule 03 only supports PPM-1U32.MPR configured to application 0. The setup will be saved automatically when users quit page 6.

5.6 Alarm management

QAX160 supports offline alarm (**OnlineXX**) of system device as well as out of range alarm for main variables (**CurveDataXX**) of RWD and RDF302. And alarms will be stored every 5 minutes.

Click the alarm icon on page 1 to enter the alarm management page (page 7), which displays the Realtime Alarm lists and History Alarm lists. 100 max. latest realtime alarms can be stored, but are lost after the power is turned OFF. 1,500 max. latest history alarms can be stored and are not lost after the power is turned OFF.

5.7 History data trend view

QAX160 supports realtime storage of the system device offline alarm*, control variable values (X1) of RWD62/RWD68/RDF302, and digital input channel 1 (DI1) for PPM-1U32.MPR. Click **Trend** button to enter page 8, and browse the history data trend view.

30 slave devices are divided into 6 groups on average. The history data for each group will be consolidated as trend curves on one page.

The trend curves will be presented in coordinates. X-axis is time and Y-axis is the actual value of each history data.

There are 2 sliding blocks on both X-axis and Y-axis to zoom in or zoom out of the history data. Touch any point in the coordinates to summarize the specific data at that time into one table.

Buttons below the coordinates offer the possibility to go to one defined time period quickly.

Note:

* Value 0 indicates device is online, 100 indicates offline.

5.8 Time & Date Setting

The default time format is 24-hour clock*. Double click the time displayed at the right bottom corner of page 1 to enter page 5 and modify the time and date of QAX160. Click figures on page 5 to set up, click **Change Time** button to confirm or click **Exit** button to quit.

Note:

* Eg. If current time is 3 p.m., then the time format is 15: 00: 00