Pyxis

MA-CIP-OIW

Oil in Water Detection System

with

Chemical Clean-In-Place

User Manual

Oct 2024

Pyxis

General Information

In no event will the manufacturer be liable for direct, indirect, special, incidental or consequential damages resulting from any defect or omission in this manual. The manufacturer reserves the right to make changes in this manual and the products it describes at any time, without notice or obligation. Revised editions are found on the manufacturer's website.

Safety Information

Please read this entire manual before unpacking, setting up or operating this equipment. Pay attention to all danger, warning and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

To make sure that the protection provided by this equipment is not impaired, do not use or install this equipment in any manner other than that specified in this manual.

Use of Hazard Information

 **DANGER**
Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING**
Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**
Indicates a potentially hazardous situation that may result in minor or moderate injury.

NOTICE
Indicates a situation which, if not avoided, may cause damage to the instrument. Information that requires special emphasis.

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Precautionary Labels

Read all labels and tags attached to the instrument. Physical injury or damage to the instrument could occur if not observed.

	This symbol, if noted on the instrument, refers to the instruction manual for operation and/or safety information.
	This symbol, when noted on a product enclosure or barrier, indicates that a risk of electrical shock and/or electrocution exists.
	Delicate internal electronic components can be damaged by static electricity, resulting in degraded performance or eventual failure.
	Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/98/EC), European electrical equipment users must now return old or end-of-life equipment to the Producer for disposal at no charge to the user.

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Contents

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Specifications

ITEM	HM-510
Range	0-1000 mg/L
Reproducibility	0.1 mg/L or ≤3%
Detection limit	0.5 mg/L
Measurement mode	Ultraviolet fluorescence method
Display	7-inch TFT LCD, 800 x 480 resolution, four-wire resistive touch screen, anti-UV coating
Data Storage	Built-in 4GB memory, up to 1 million data/event record, CSV upload vis USB disk drive
Power	100 - 240V AC 50/60Hz, 3 Amp fuse; 200 W
Communication	Modbus RTU /Modbus TCP
4G Communication	Global 4G communication modem, supporting data upload to cloud servers (optional)
Operating temperature	5 – 45 ℃
Storage temperature	Instrument: -20 - +55 ℃; sensor: 0 - +50 ℃
Protection class	IP65
Relative humidity	20 % - 90 %
Product weight	50 kg
Product Size	H800 x D600 x W400 mm
Recirculation pump	60 PSI, 1.3 GPM maximum flow
Dosing pump	SEKO USA Model # AML200NPE0U00U SEKO China Model #AML200NPE0800

*As Pyxis technology is continuously updated, this technical parameter may change at any time without notice

MA-CIP-OIW-PANEL SPARE PART NAME & DESCRIPTION	PYXIS P/N
HM-510 *(0-1000㎎/L)*	52102
UC-100S *(Replacement Display/Data Logging Terminal w/PLC)*	43047
OIW Panel Inlet/Outlet Isolation Valve *Normally Open Motorized / 24 VDC / 5W / IP67*	44024
OIW Panel Circulation Isolation Valve *Normally Closed Motorized / 24 VDC / 5W / IP67*	44025
OIW Panel Recirculation Pump *1.3GPM@60psi / 24 VDC / 40W / IP44*	52607
SEKO Chemical Metering Pump Replacement Model #AML200NPE0800	21748
FS-100 *(Replacement Ultrasonic Flowmeter with Display 0-3000mL/Minute)*	54200

2. System Overview

The OIW/CIP system consists of the following major components:

1. PLC and touch screen for controlling electric valves and pumps, data logging and data display.
2. A Pyxis HM-510 (*0-1,000mg/L*) used as the OIW sensor.
3. Three electric ball valves for isolating the flow for automatic cleaning operation.
4. SEKO Dosing pump for dosing the cleaning solution to the system.
5. Recirculation pump for recirculating the cleaning solution when the cleaning loop is isolated during the cleaning operation.
6. Two manual PVC ball valves that can be used to throttle the flow.

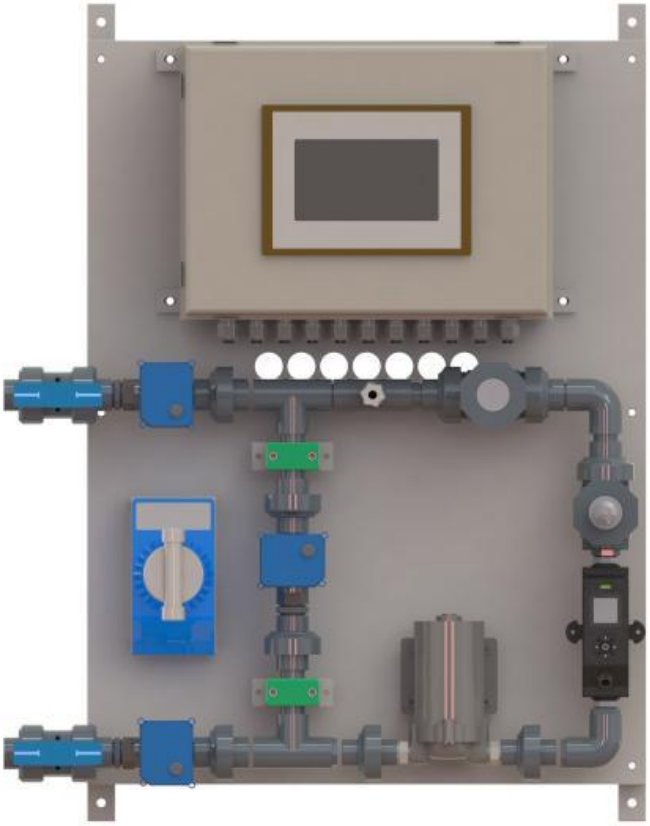


Figure. 1 System Layout

3. Installation and Connection

3.1. Mounting and Sample Installation

Mount the unit to a wall or a mounting frame. Secure the four mounting brackets. Leave 2 feet space on either side for operation access.

Connect the sample water to the ¾ inch sample input ball valve. Make sure the sample pressure is less than 30 PSI. Connect the sample output to a drain line or return the sample to the process. If the sample is discharged to a drain, please adjust the sample outlet ball valve to slightly pressurize the system to prevent siphoning the cleaning chemical. Use the two PVC ball valves to throttle the flow to within 2 GPM.

The cleaning chemical is not provided in this package. Install a cleaning chemical container and secure dosing pump suction tubing to the chemical container. Cleaning material is application dependent and must be identified and secured by the user.

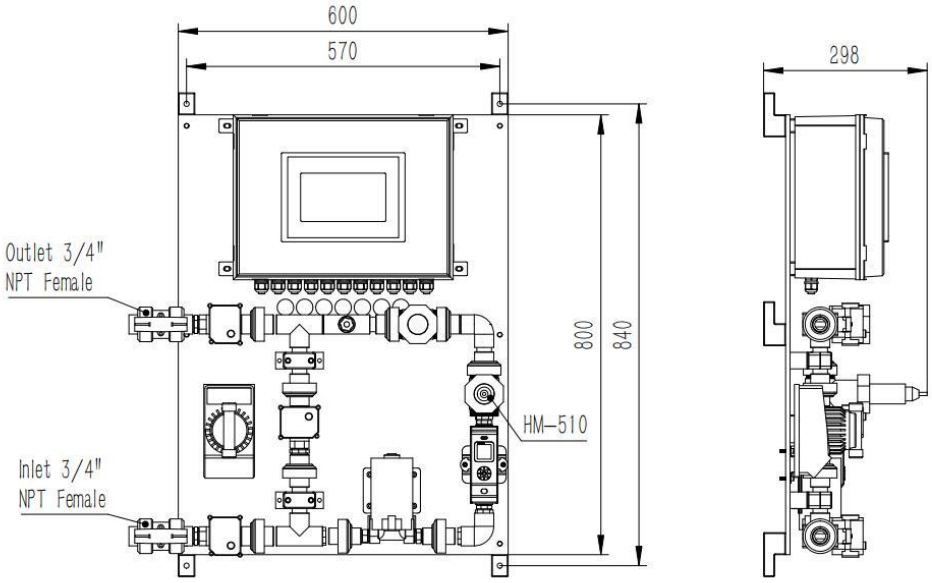


Figure. 2 Dimensions

3.2. Electrical Connection

Connect the power cord included in the package to the power socket on the left side of the PLC enclosure. Plug the power cord to a 110 – 240 VAC outlet.

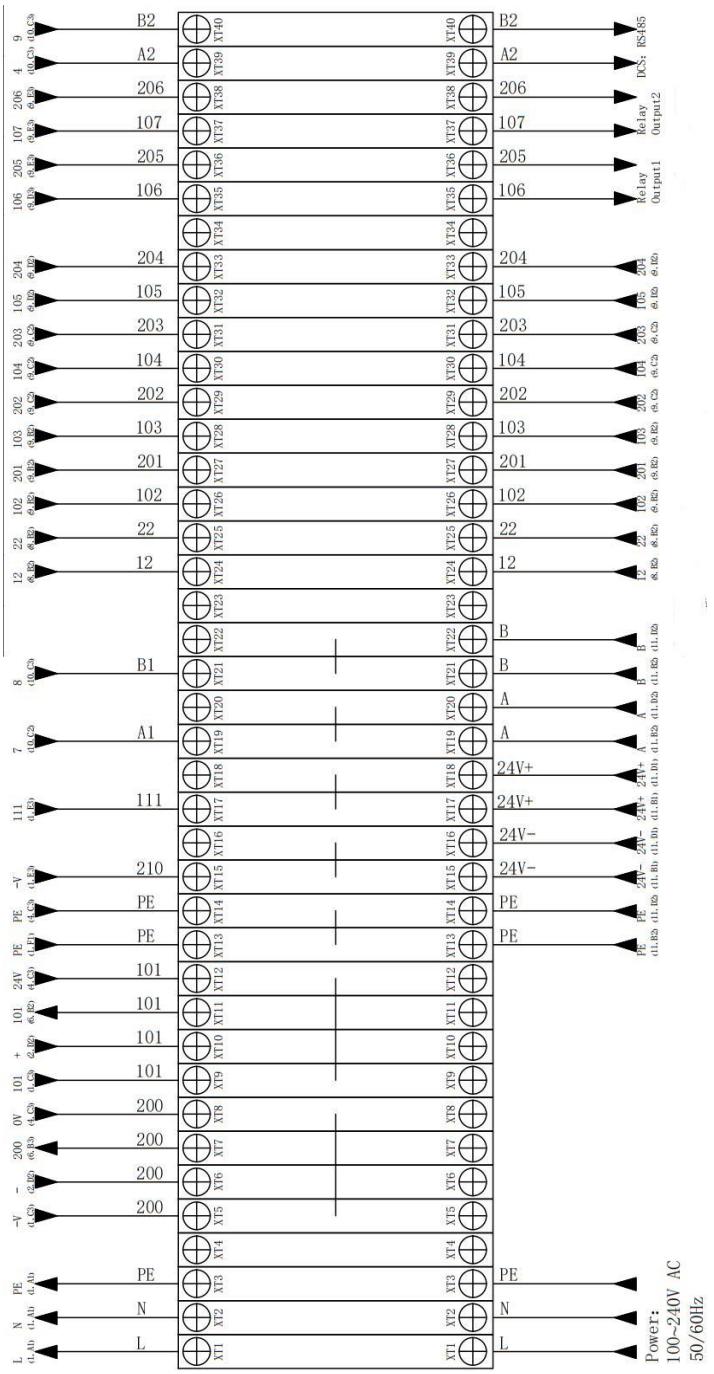


Figure. 3 Terminal wiring diagram

Failure to follow the electrical operation specifications may cause electric shock injury or even death.

4. FS-100 Flow Control Module Overview & Use

The Flow Control Module is a stand-alone water flow measurement and control solution, a unique platform that provides accurate flow measurement and regulation. The Flow Control Module is equipped with the Pyxis FS-100 ultrasonic flow meter with display, which allows direct control of pre-installed regulating valves through a simple user programmable interface and a measurement range of 0 – 3,000mL/min.

4.1. FS-100 Key Function

Enter Key

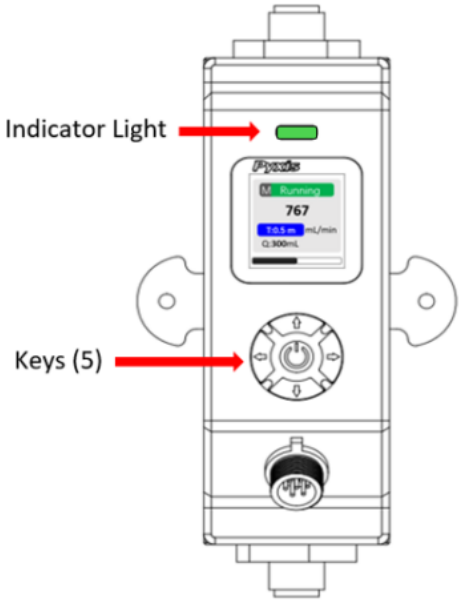
- Main screen → Setting Menu.
- Confirms and saves the input values.

◀ ▶ Left / Right Key

- Main screen → Trend Chart.
- Move the cursor to the left or right.
- Turn pages on the screen.

▲▼ Up / Down Key

- To increase or decrease a displayed number value.
- Jump up and down in the operating menu.



LED Status Indicator

The status LED is used for a quick visualization of the flowmeter status.

LED Behavior	Status
Green	Normal Running
Red	Alarm Information

4.2. FS-100 Main Screen

Main Screen Description

NO.	Description
1	Flow Detection Mode (1)
2	Working Status (same color as LED status indicator)
3	Flow Rate Value
4	Timer (2) (unit: auto range)
5	Unit of measured flow value
6	Accumulated Flow Value (unit: auto range)

(1) **R** = Average Flow Rate Mode
M = Instantaneous Flow Rate Mode
C = Flow Rate Control Mode ***NOTE*** *For C-Mode refer to Section 7.4 for programming details.*

(2) The **Timer** feature is enabled when the FS-100 is powered on and can be set by pressing ▼ key.

- **Pause or Restart the Timer:** Press ▼ key momentarily and release.
- **Reset the Timer:** Press and hold ▼ key for about two seconds
-

4.3. FS-100 Flow Trend Chart

From the main screen, Press ◀ or ▶ to the trend chart display. Flow values will be displayed as a line graph to show the real-time trend. Press ◀ or ▶ to return to the main screen.

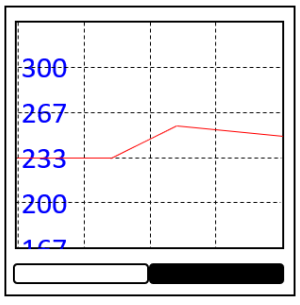


Figure. 4 - FS-100 Flow Trend Chart

4.4. FS-100 - Setting the C-Mode for the Sample Flow Control

The FS-100 sensor when set to C-Control mode, will enable users to program a desired flow rate setpoint and provide a 4-20mA output PID signal which can be forwarded to a 4-20mA controlled ball valve upstream of the analyzer for precise sample flow control. As a standard however, the system only uses the FS-100 sensor for live flow measurement, display, data logging and output signal use.

Press ◀ or ▶ in the setting menu and select ***[Pattern]***. The following operating modes are available:

- **Flow Rate (R) =** Display the <u>average</u> flow rate
- **Flow Meter (M) =** Display the <u>instantaneous</u> flow rate
- **Flow Control (C) =** Set a desired constant flow rate

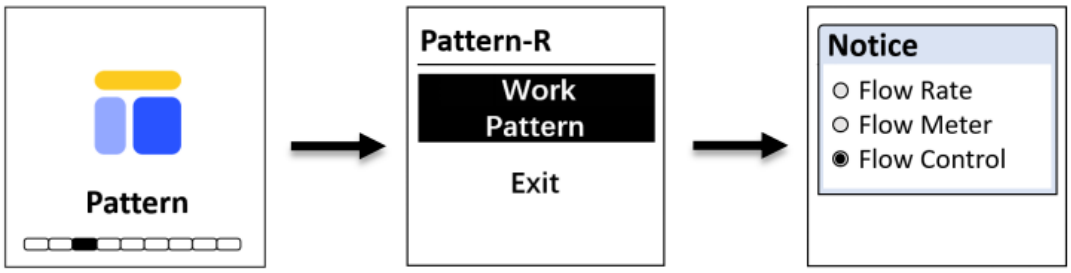


Figure. 5 - Operating Mode

IMPORTANT NOTE *The system <u>does not have an electric control valve</u>. If this feature is desired, the user must provide and install their own 4-20mA regulated ball valve. If no valve is connected while in C mode, the FS-100 will go into alarm as it cannot regulate flow correctly to the programmed / desired setpoint.*

When Flow Control Mode (C) is selected, a user defined flow rate setpoint must be entered. The FS-100 will automatically control the regulating valve according to the preset flow rate with an internally calculated PID algorithm.

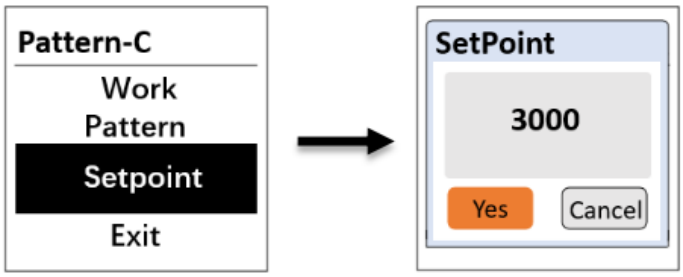


Figure. 6 - Flow Control (C) Operating Mode with User Defined Setpoint

NOTE *If the actual flow rate does not reach the preset flow rate <u>for a duration time of longer than two minutes</u>, the main screen and LED indicator will display **RED** alarm status .*

4.5. FS-100 Modbus Communication Settings

Press ◀ or ▶ in the setting menu and select ***[Com]*** to modify communication parameters (Figure 7).

The following communication settings are pre-programmed into the FS-100 for direct communication with the UC-100A display interface. ***IMPORTANT NOTE*** *These values should NOT BE ALTERED; otherwise flow control failure will occur.*

- **Modbus Address** *= 95*
- **Baud Rate** *= 9600*
- **Parity =** *Even*

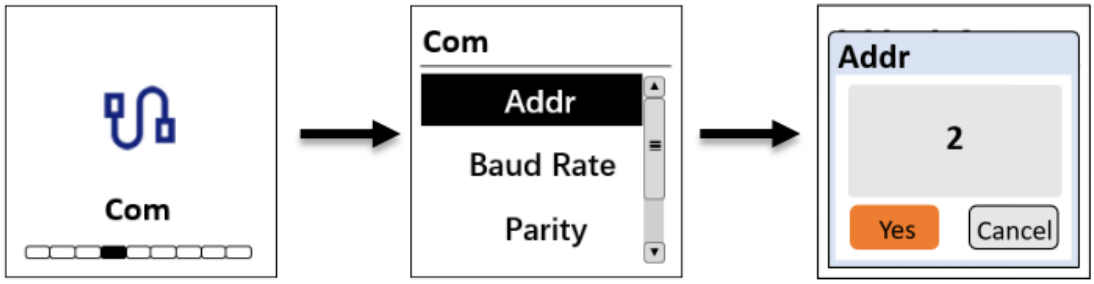


Figure. 7 - Communication Settings

4.6. FS-100 Factory Reset

If the user wants to restore all device settings to factory default parameters, Navigate to ***[Info]*** screen, press and hold ⏻ key for about two seconds, the FS-100 will reboot itself.

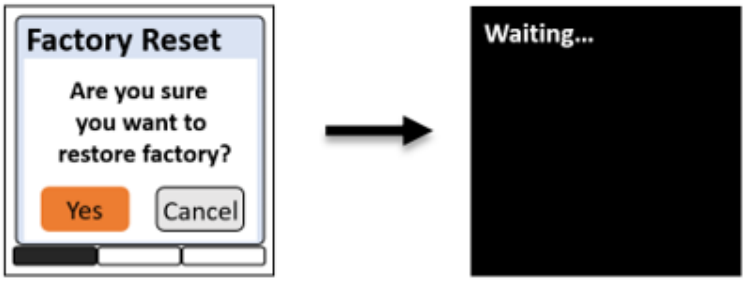


Figure. 8 - Factory Reset

4.7. FS-100 Device Information & Diagnosis

Press ◀ or ▶ in the setting menu and select ***[Info].*** This screen contains the device name, serial number, software version, and hardware version. Provide an image of both the **DEVICE INFORMATION** screen and the **DIAGNOSIS** screen when you contact Pyxis (service@pyxis-lab.com) for troubleshooting your device or call +1 (866) 203-8397 ext 2.

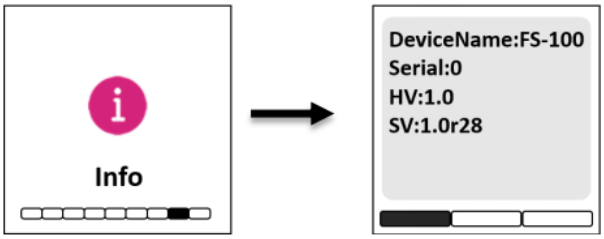


Figure. 9 - Device Information

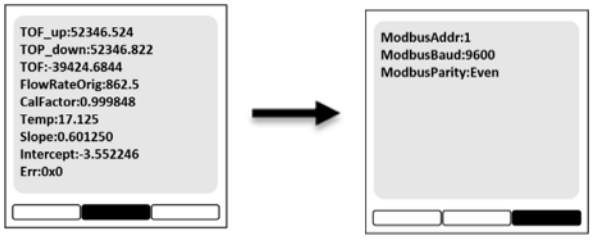


Figure. 10 - Diagnosis

Press ◀ or ▶ to turn the page. This screen information has no use for normal operation, but instead is used for device troubleshooting. Provide an image of both the **DEVICE INFORMATION** screen and the **DIAGNOSIS** screen when you contact Pyxis (service@pyxis-lab.com) for troubleshooting your device or call +1 (866) 203-8397 ext 2.

5. Touch Screen Operation

5.1. Initial Screen

After the system is powered on, the initial screen is shown.

Figure. 11 Initial screen

5.2. Real-Time Monitoring

Click the "**Enter System**" button on the main interface to enter the real-time monitoring screen of the system. The data detected by the Pyxis sensors will be displayed in real-time. See a functional overview of each section of this screen highlighted below.

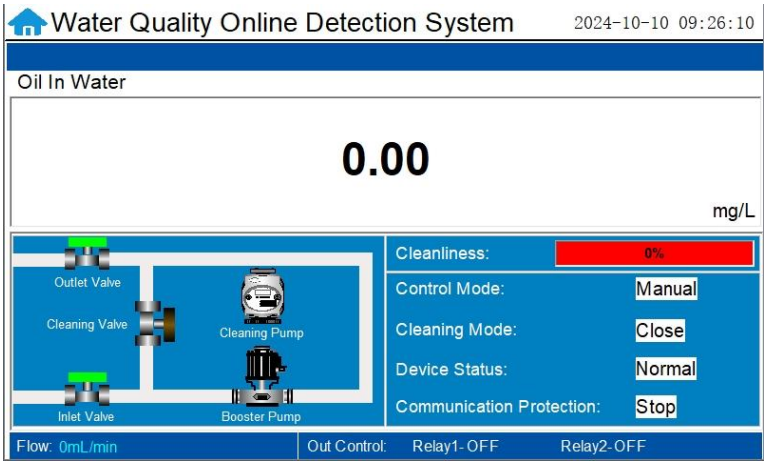


Figure. 12 Main screen

Control Mode shows whether the system is in manual or automatic mode.

Cleaning Mode shows one of three cleaning modes: no cleaning, "Close"; timer control, "cycle"; cleanliness setpoint control, "threshold".

Device Status shows one of operation status: Normal, the system is in the measurement mode; Cleaning, the system cleaning is in progress; Protection, the system is being locked after failing to reach automatic cleanliness setpoint.

Communication Protection shows whether the system data logging is being stopped during the cleaning operation and a quiet period right after the cleaning operation. **Stop** means that the system is not in the communication protection and data logging is currently being enabled.

5.3. Menu Bar

Click the " " button in the upper left corner of the screen to enter the system menu interface, where the user can select the desired operation interface.

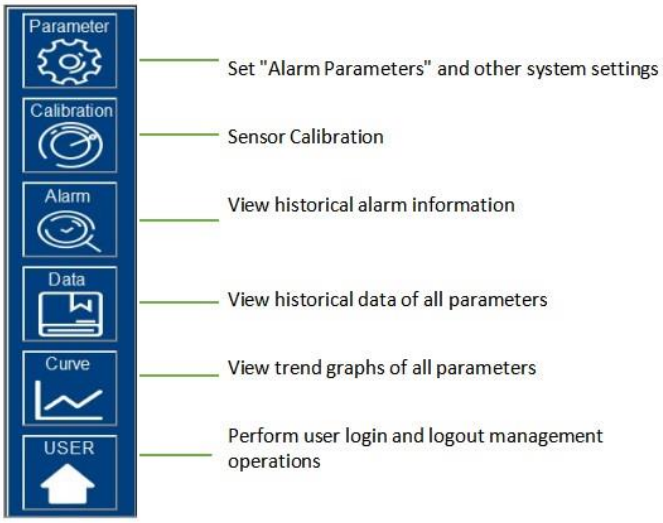


Figure. 13 Menu

5.4. User Login

The user must log in with the username and password to be able to change the system parameters. Without login, the user can only view the readings on the main interface. Click the "User Login" button, a user login window will be prompted, Select the user "**pyxis**", enter the password: "**888888**" in the user password field. New users can be set up in User Management.

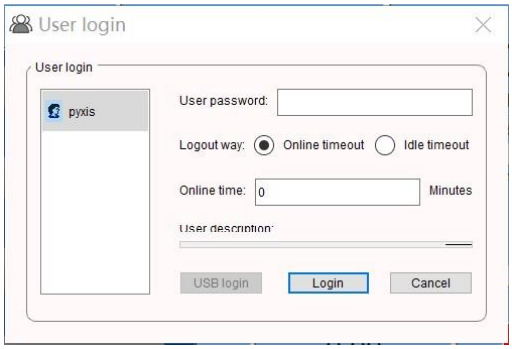


Figure. 14 User Login

5.5. Parameter Setting

Click the "Parameter" button in the menu bar, Select submenu items: **Alarm Parameters**, **Control Parameters** and **Cleaning Parameter**.

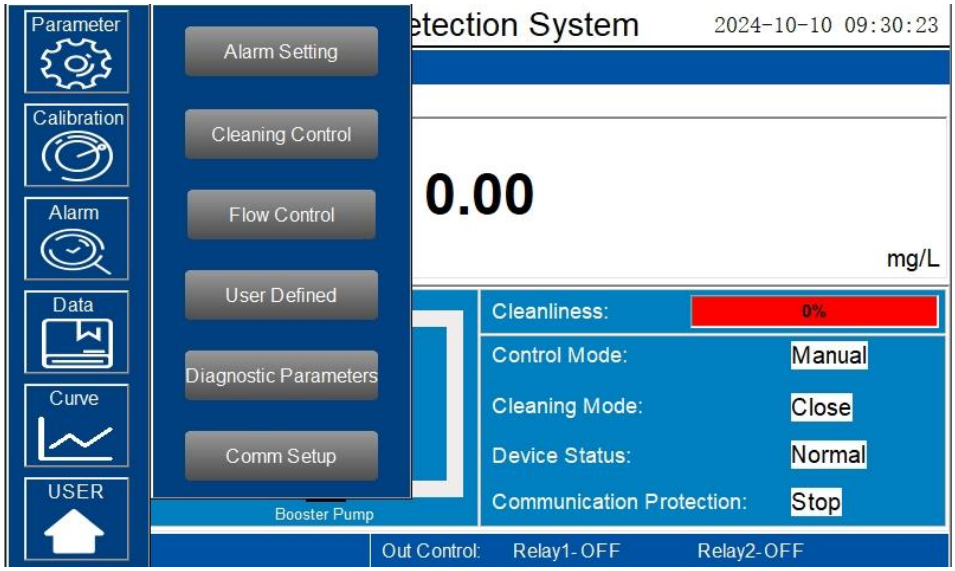


Figure. 15 Parameter Settings

5.5.1. Alarm Setting

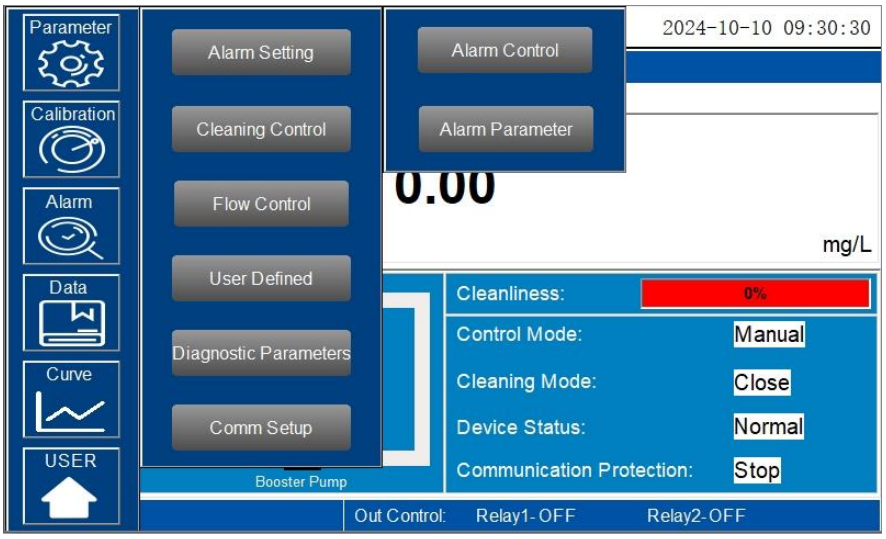


Figure. 16 Alarm Setting

You can connect relay to the site according to the wiring diagram below.

Relay Output 1 can be used to connect to an alarm light. When the device generates an alarm signal, the alarm light connected to this Relay will flash.

Relay Output 2 can be used to connect to the alarm control output. For example, when there is an alarm, close the water inlet valve on the sample flow.

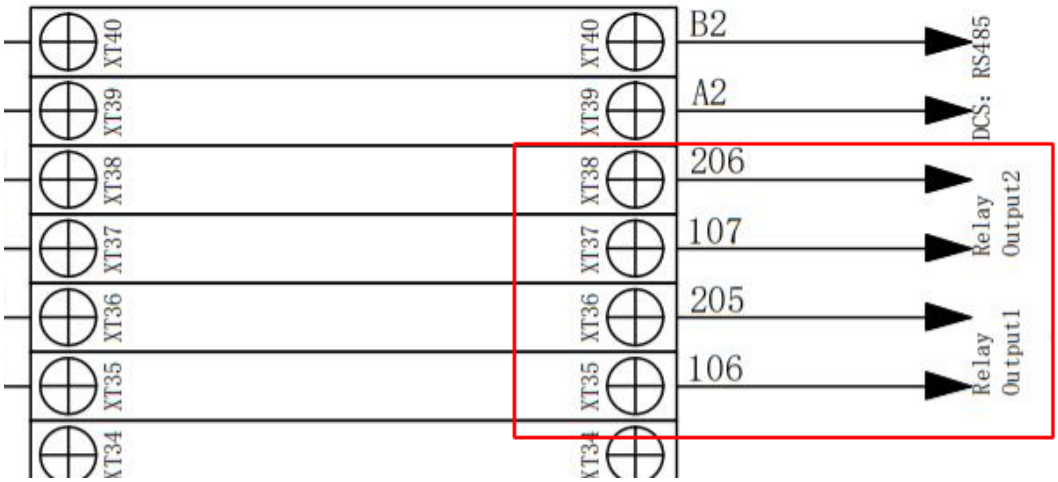


Figure. 17 Flow Control Relay

Alarm Control

When the online user has the right to operate, upper and lower alarm limits can be set. Click "Alarm Parameter " to enter the interface of alarm parameter setting. Here you can set the alarm upper limit and lower limit of each sensor.

When "Control Selection" is selected as manual, you can click "ON" to output the signal.

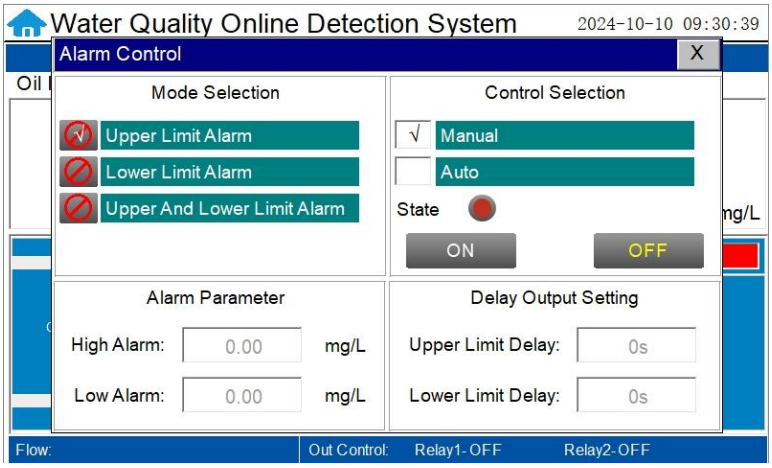


Figure. 18 Alarm Control

**** IMPORTANT NOTE*** *When* ***"Control Selection"*** *is selected* ***Auto****, the device will alarm and signal output according to the parameters set below. （Both Relay output 1 and Relay output 2 generate signals at the same time.）It should be noted that when you select "upper limit alarm" or "lower limit alarm", only the upper limit or lower limit will alarm. Only when selecting "Upper limit and lower limit alarm", will there be both an upper limit and lower limit alarm.*

Alarm Parameter

When the online user has the right to operate, the upper and lower alarm limits can be set. Click "Alarm Parameter " to enter the interface of alarm parameter setting. Here you can set the alarm upper limit and lower limit of each sensor. When the measured value is lower than the set lower limit, “XX lower limit” alarm will be displayed on the real-time monitoring screen. When the measured value is greater than the set upper limit value, the "XX upper limit” will be displayed. Users can also select to turn on or off the alarm display function in the upper right of the corresponding parameter list.

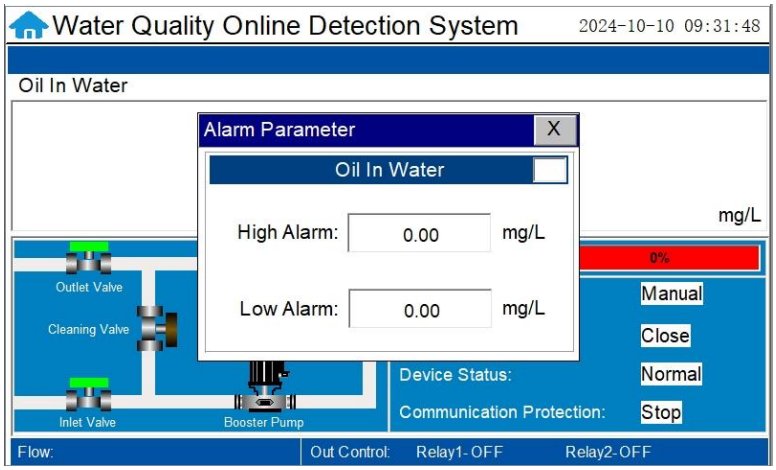


Figure. 19 Alarm Parameter

5.5.2. Cleaning Control

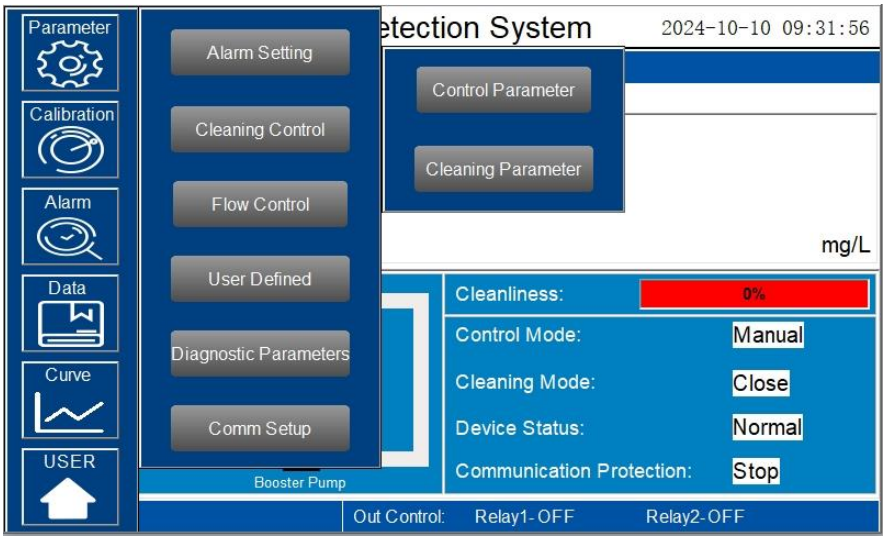


Figure. 20 Cleaning Control

Control Parameter

Click **Control Parameter** to launch the control interface, where the control mode and cleaning control mode are selected.

In the Auto mode, the pumps and valves are automatically turned on and off according to the cleaning setup programmed by the user. In the manual mode, individual pumps and valves can be manually turned on and off.

Toggle the Auto control to Manual control. Turn on pumps and valves to make sure that they are functioning properly.

To prime the chemical cleaner dosing pump, manually turn **ON** the Outlet electric valve and manually turn **OFF** the sample Inlet electric valve. Turn **ON** the Cleaning Pump to prime the chemical cleaner dosing pump. After the cleaning dosing pump is primed, toggle the **Manual** back to **Auto** control mode.

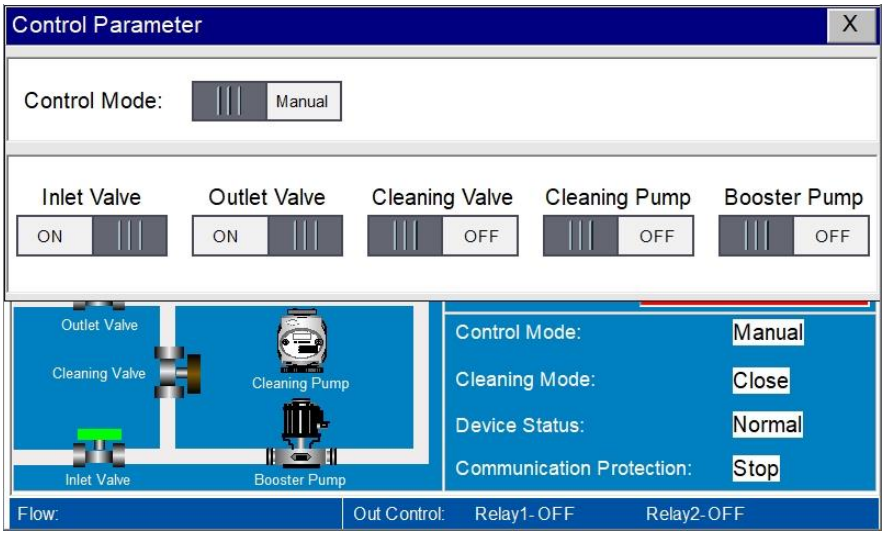


Figure. 21 Control Parameters

Cleaning Parameter

Click the **Cleaning Parameter** to launch the cleaning control parameter interface, where the user can select a cleaning control mode among three control modes, 1) Interval or periodic timer cleaning control, 2) Threshold or % sensor cleanliness setpoint control, or 3) no cleaning.

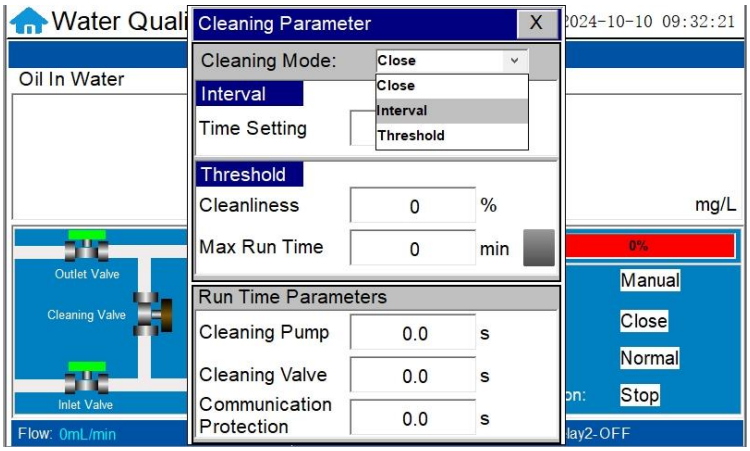


Figure. 22 Cleaning Parameter

Run Time Parameters

Cleaning Pump is the duration in seconds that the dosing pump injects the cleaning chemicals to the system.

Cleaning Valve is the duration in seconds that the recirculation booster pump operates after the cleaning chemicals have been injected.

Communication Protection is the time in seconds before data logging is resumed after the cleaning operation. During the recirculation pump operation period, the data logging is disabled.

Interval (Timer) Control Please select the timer control first before the system dynamics is being understood.

Time Setting is the cleaning time interval in hours.

Threshold (Setpoint) Control In the setpoint control, the Threshold Cleanliness Value will trigger the cleaning action. The percentage of cleanliness is measured by the amount of light attenuation through the measurement cell by the HM-510 probe. The probe cannot differentiate light attenuation caused by deposition on the optical surface or by absorption by the bulk water color. The cleanliness value will not be 100% for water samples with color and turbidity when the probe's optical windows are clean. If the initial cleanliness value as example is 80% measured when the system is clean, the user can empirically set up the threshold setpoint at 40%. Please note that Pyxis sensor automatically compensate the light attenuation in converting measured raw signal to the concentration. The sensor will tolerate the deposition build up until 80% excitation light is being blocked the deposition on the optical path and/or by the bulk sample water color and turbidity.

Max Run Time is the duration that the recirculation pump will continue to operate after the normal period of recirculation pump operation and the cleanliness value measured has not reached to the setpoint. When this happens, the automatic cleanliness setpoint cleaning will stop and the user must resume the automatic cleaning operation by selecting cleanliness setpoint cleaning against. You can select the rear box to enable this function

5.5.1. Flow Alarm Control

On this screen, you can set the flow alarm control for the FS-100. And you can choose to enable or disable this feature.

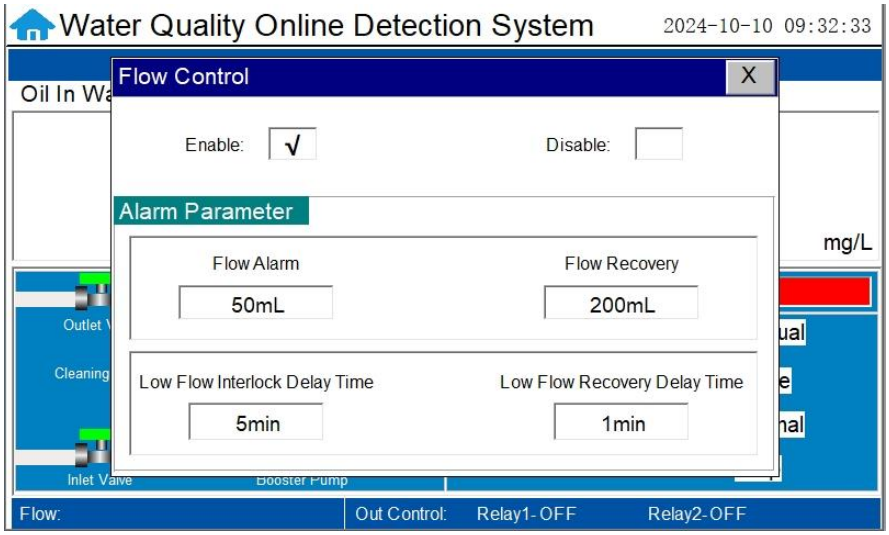


Figure. 23 Flow Control

The Flow Alarm generates an alarm based on the setpoint versus the sample flow measured by the FS-100. When the sample flow is less than Flow Alarm for a period greater than the Low Flow Interlock Delay Time, an alarm is triggered, and the FS-100 sensor displays 0 and blinks.

If the sample flow rate measured is greater than the Flow Recovery setpoint for a period greater than the Low Flow Recovery Delay Time, the sensor will resume measurement.

IMPORTANT NOTE *- When a low flow alarm is triggered, the system will not proceed with a sensor cleaning cycle. Likewise, no alarms will be triggered when the system is in cleaning mode.*

5.5.2. User Defined

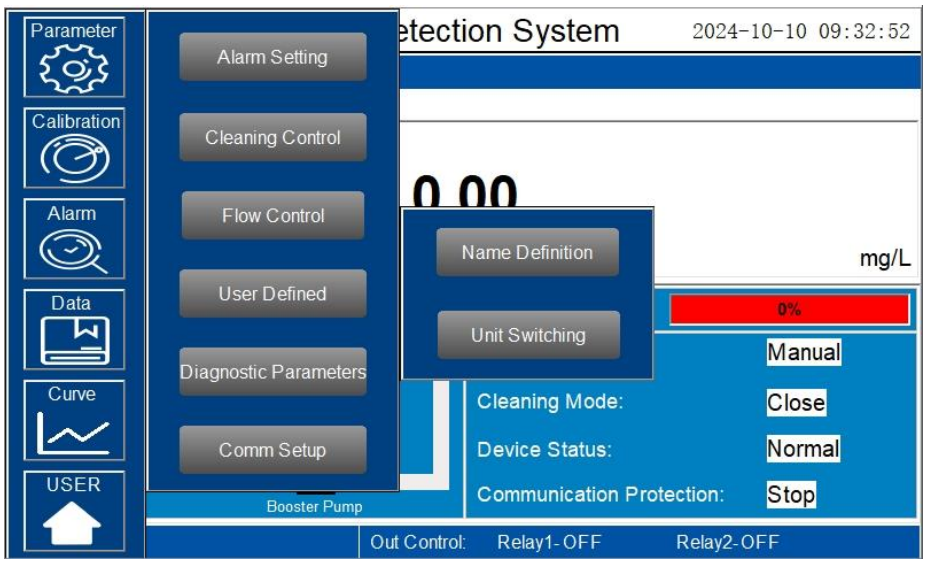


Figure. 24 User Defined

The "**User Defined**" setting function allows users to assign a customized name, unit of measure.

Name Definition

Click the orange dialog box to customize the sensor name.

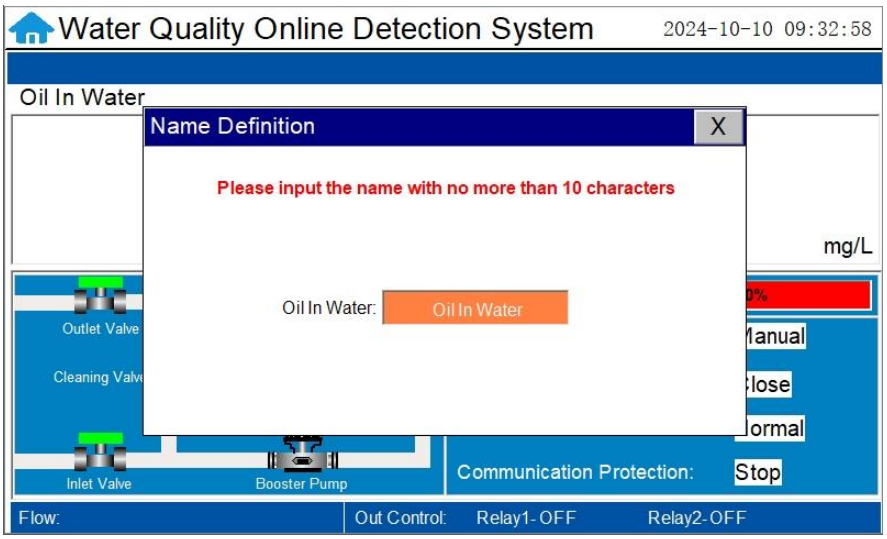


Figure. 25 Name Definition

Unit of Measure Switching

Users can change the unit of temperature and flow rate in "Unit Switching".

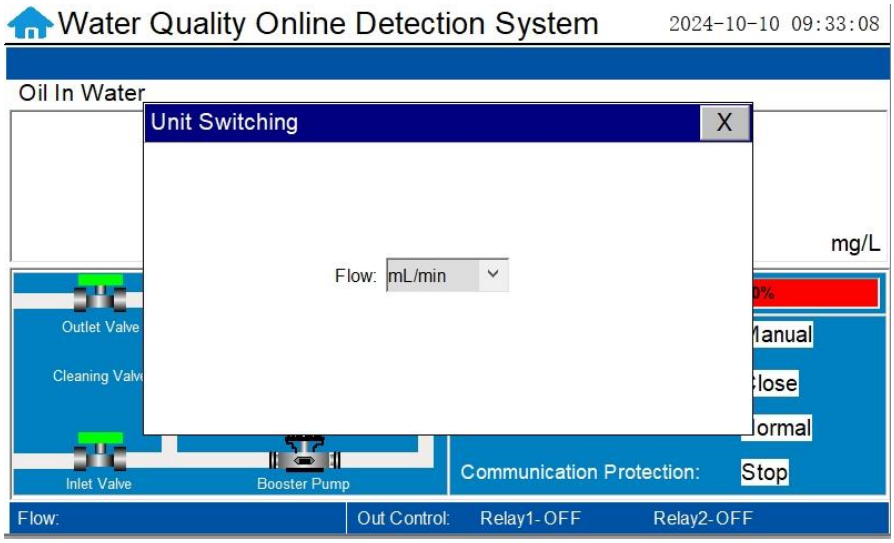


Figure. 26 Unit Switching

5.5.3. Diagnostic Parameters

Click “Diagnosis Parameters” to the diagnosis page. In the diagnosis page, the raw data measured by the probe is displayed. To help troubleshooting possible issues with the probe, please save an image of this data when the probe is placed in a clean water (tap water or deionized water), in a standard, and in the sample that the probe is intended for.

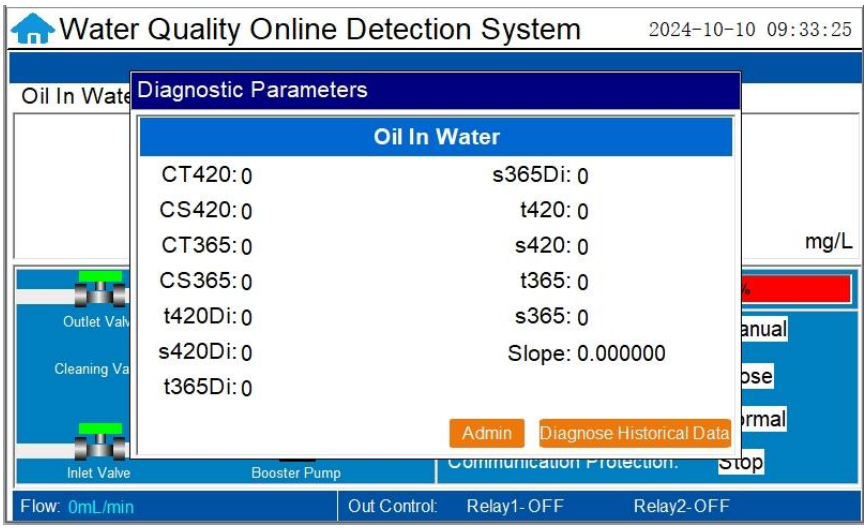


Figure. 27 Diagnostic Parameters

5.5.4. Communication Setting

If the site needs to use DCS to read device information, just connect the master station device to the controller through the terminal (see the attached electrical diagram for the terminal) and read the data according to the parameter register table (see Section 6.0 Modbus Communication address table).

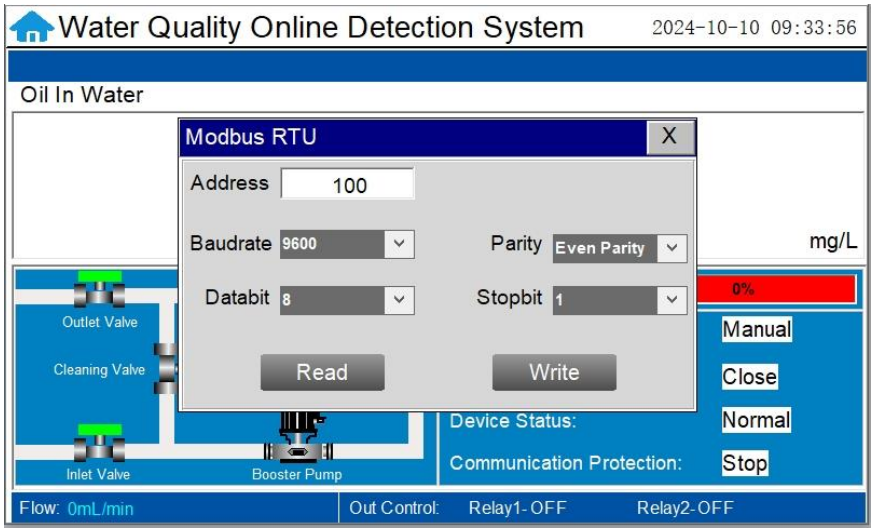


Figure. 28 Modbus RTU

It is also possible to connect based on the Ethernet address

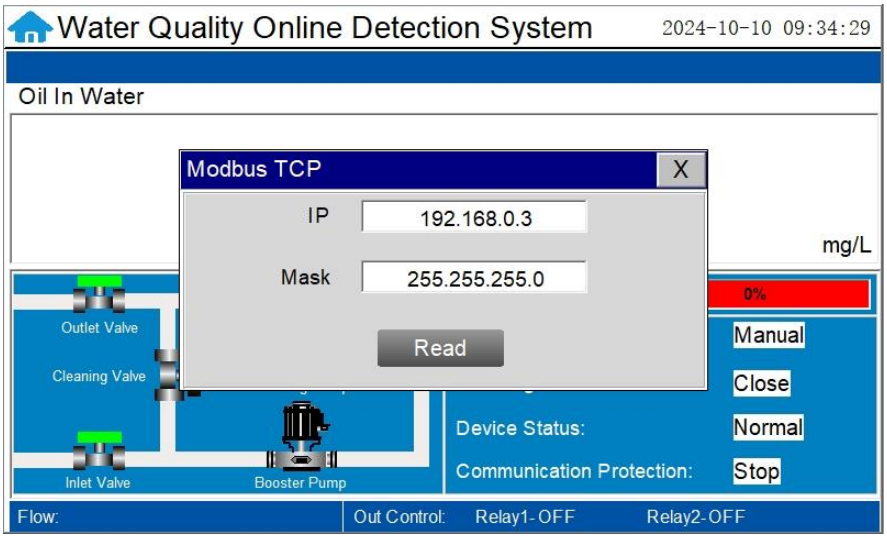


Figure. 29 Modbus TCP

5.6. Parameter Calibration

Click the **Calibration** button in the menu bar to launch the calibration interface.

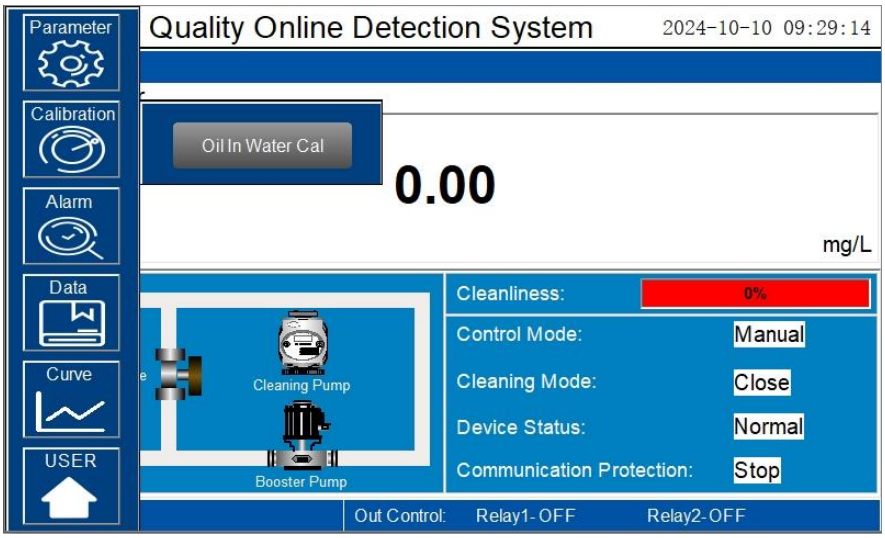


Figure. 30 Calibration Menu

5.6.1. Oil in Water Calibration

The Oil in water sensor has been strictly calibrated before leaving the factory. Therefore, if the sensor is kept clean, the user does not need to calibrate the sensor for one year. However, the user can calibrate the sensor according to their own needs.

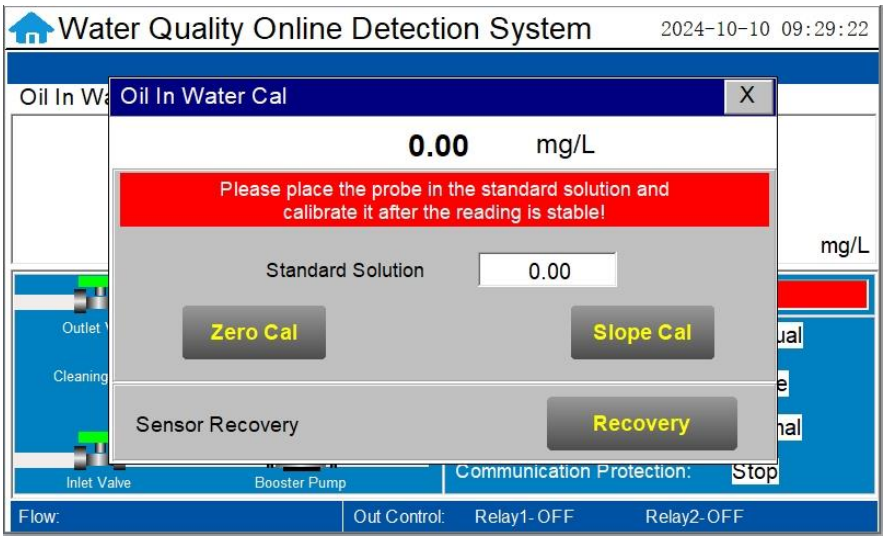


Figure. 31 OIW Calibration

One Point Calibration

Close the water inlet valve, drain all the water in the pipeline, remove the sensor and rinse it with deionized water or tap water 3 times. Place the sensor into a beaker filled with a known Oil in Water standard solution, or with Pyxis OIW-500 (P/N 21038) synthetic oil-in-water calibration standard and cover with a towel to shield the sensor from ambient light. Once stabilized, enter the oil concentration value of the standard solution and click the " Slope Calibration" to start the Slope Calibration. After the calibration success box pops up, the calibration is successful.

IMPORTAN NOTE *If deposits are present on the inside of the optical channel of the HM-500 series sensor you may consider soaking the sensor in Pyxis Probe Cleaning Solution Kit (P/N SER-01) for 30 minutes, then brushing with the provided pipe cleaner brush of the kit.*

Two Point Calibration

Close the water inlet valve, drain all the water in the pipeline, remove the sensor and rinse it with deionized water or tap water 3 times. Then insert the sensor into a beaker filled with deionized water and cover with a towel to shield the sensor from ambient light. Click " Zero Calibration" to start the zero calibration.

Then, repeat the above steps and flush the sensor 2-3 times with deionized water or tap water. Place the sensor into a beaker filled with a known Oil in Water standard solution, or with Pyxis OIW-500 (P/N 21038) synthetic oil-in-water calibration standard and cover with a towel to shield the sensor from ambient light. Once stabilized, enter the oil concentration value of the standard solution and click the " Slope Calibration" to start the Slope Calibration. After the calibration success box pops up, the calibration is successful.

IMPORTAN NOTE *If deposits are present on the inside of the optical channel of the HM-500 series sensor you may consider soaking the sensor in Pyxis Probe Cleaning Solution Kit (P/N SER-01) for 30 minutes, then brushing with the provided pipe cleaner brush of the kit.*

5.7. Alarm Browsing

Click the **Alarm Browsing** button on the main interface to enter the alarm browsing interface.

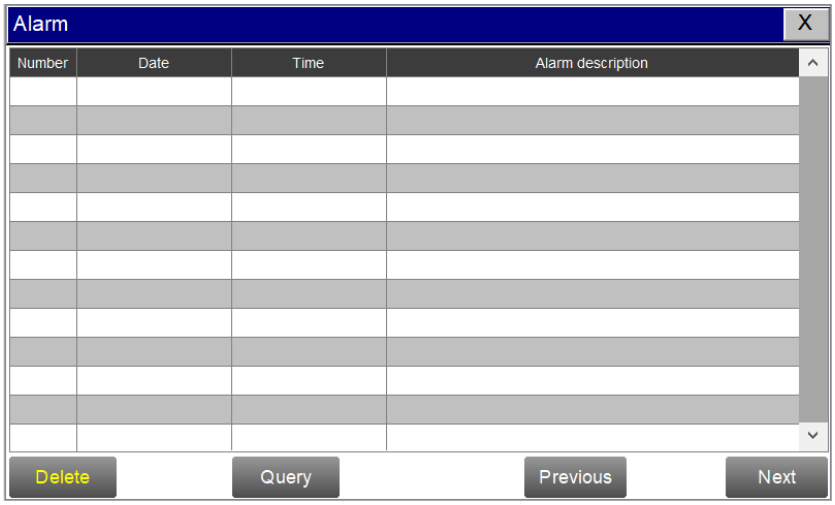


Figure. 32 Alarm Browsing

In this interface, the user can browse all alarm signals. Drag the right scroll bar to slide up and down to view historical alarm records. You can also click "Previous" and "Next" to turn pages quickly.

Click Query, enter the number in the pop-up box and query, you can quickly view the alarm problem of the corresponding number.

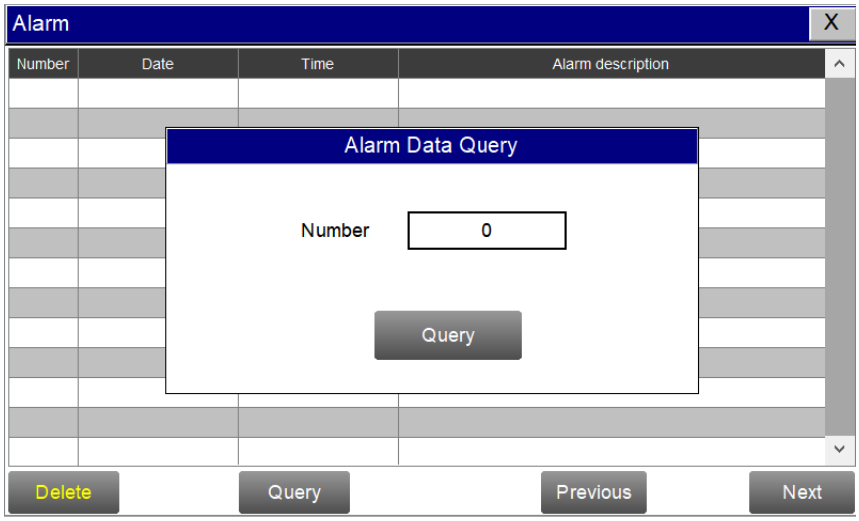


Figure. 33 Alarm data query interface

After clicking the delete button in the lower left corner, all alarm records will be deleted. After clicking delete, you need to exit the current interface and enter again, the historical data in the data report will be cleared.

5.8. Historical Data

Click the **Historical Data** button in the menu bar to enter the data report interface.

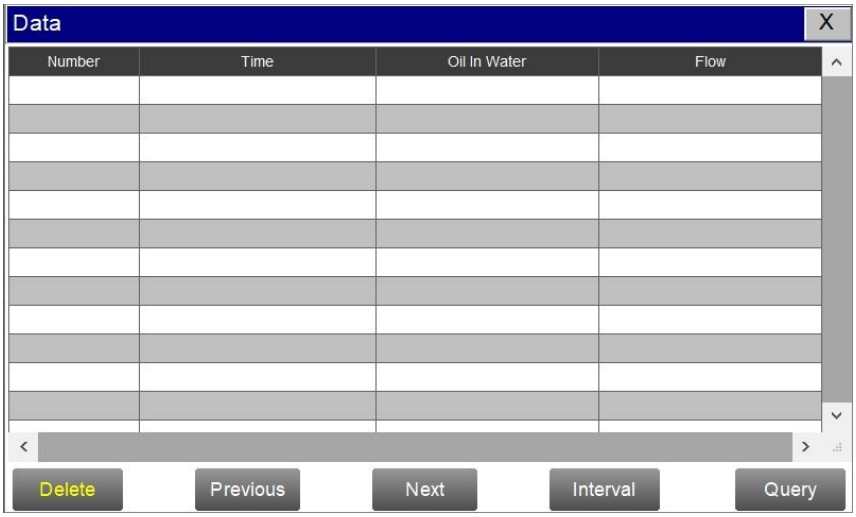


Figure. 34 Historical data

In the data report, the user can view the stored data of all parameters. The system records sensor readings every 4 seconds by default. Drag the scroll bar on the right to slide up or down or click "Previous" and "Next" to view historical data records. The data record can save 100,000 pieces of data. After 100,000 data points saved, new data will overwrite the previous data.

The user can click the ‘Periodicity’ button to change the data saving time interval

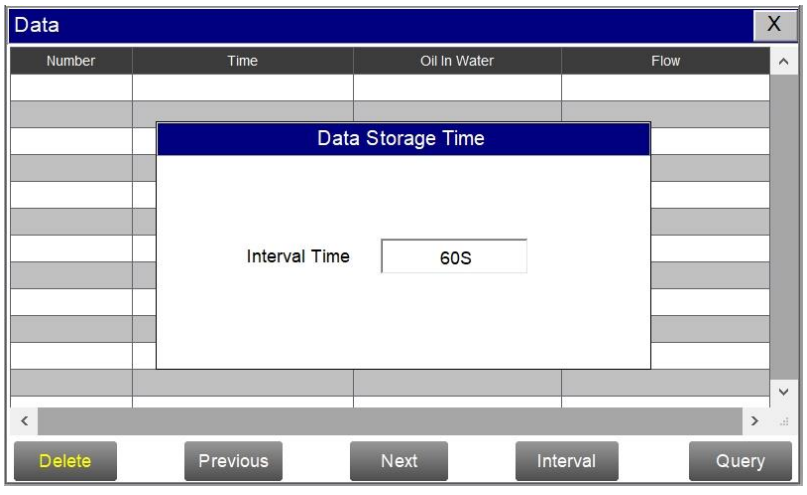


Figure. 35 Data storage retrieving setting

Click Delete in the lower left corner. After entering the retention time, click the Delete button to clear all historical data except for those within the retention time period.

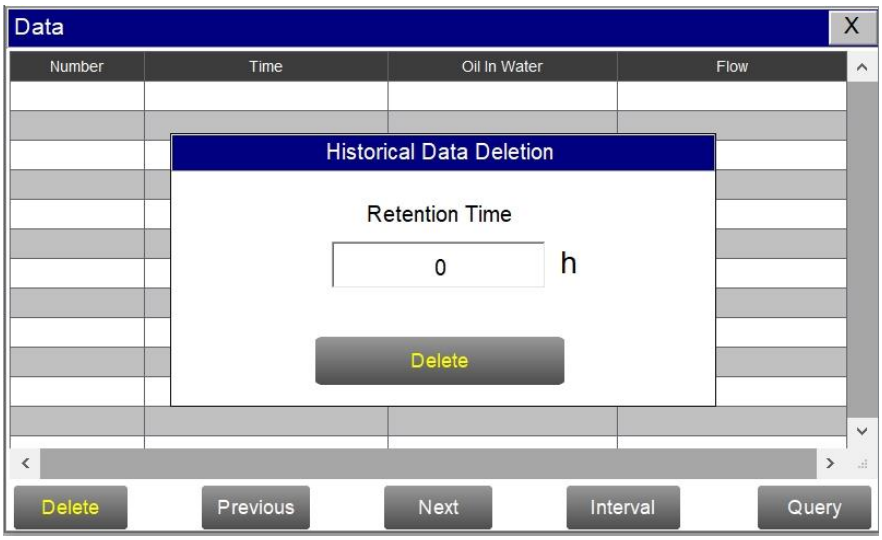


Figure. 36 Deleting historical data

Click the query in the lower right corner, enter the start time and end time, and then click the query button ***NOTE*** *The start time and end time need to be filled in completely and exactly according to the system time format. Otherwise, it will not be recognized for the query.*

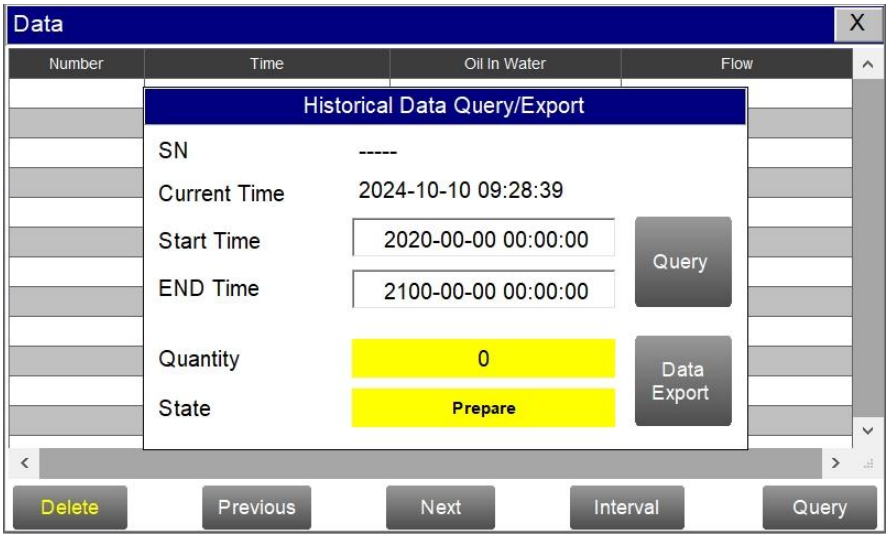


Figure. 37 Historical data query interface

Insert a USB disk behind the screen and enter the time range of the data to be exported in the query area, click on the data export, when the status is displayed as success, and the quantity is positive, the data export in the CSV format is successful. If the quantity is negative, the data was not successfully exported. Please check whether the time format is correct.

When the quantity appears, you can refer to the following table to check the problem.

Quantity	Description
-1001	Progress or control data object type is incorrect
-1004	Group object name does not exist or the group object does not have the save property
-1020	The start time of the export is greater than the end time
-1021	USB flash drive is not inserted
-1022	Only one export task is allowed at the same time
-1023	The number of records read is 0
-1024	File operation failed
-1025	Export path is empty
-1026	Export path is not legal
-1027	Incorrect time format
-1028	Unsupported export mode

5.9. Historical Data Curve

Click the **Historical Curve** button in the menu bar to launch the trend curve interface. You can click the button below the time axis to browse and view the values in different time periods. Clicking the Y-axis range will pop up the Y-axis range setup as shown in figure 27. Enter the minimum and maximum values to reset the Y axis range.

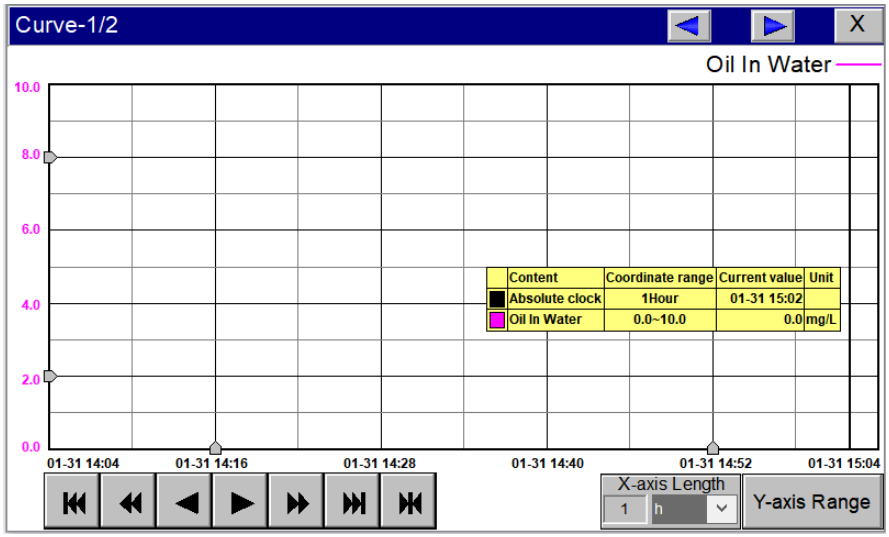


Figure. 38 Trend curve interface

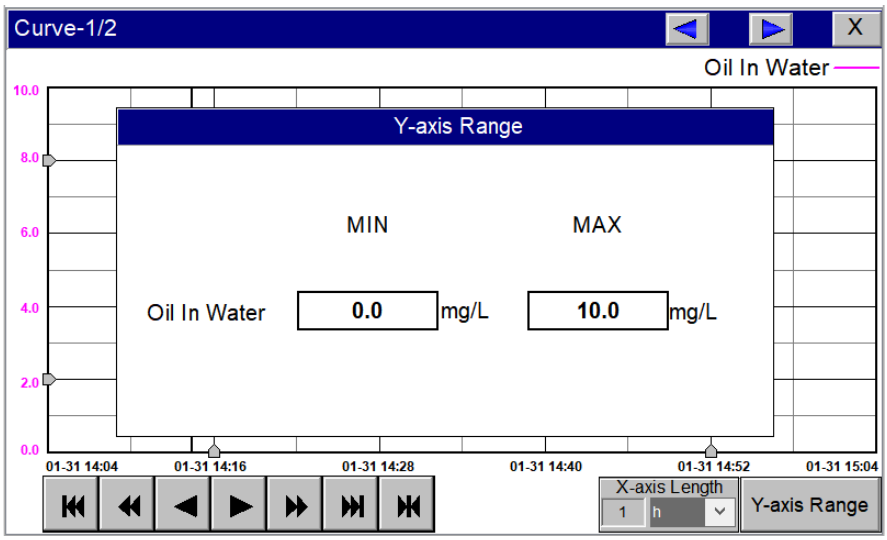


Figure. 39 Y-axis range setting

- The curve will scroll back (to the left of the X-axis) one page
- The curve will scroll back (to the left of the X-axis) half the page of the curve
- The curve will scroll backward (to the left of the X-axis) to a position where the main line is drawn
- The curve will scroll forward (to the right of the X-axis) to a position where the main line is drawn
- The curve will scroll forward (to the right of the X-axis) half the page of the curve
- The curve will scroll forward (to the right of the X-axis) one page
- A dialog box will pop up to reset the starting time of the curve

Figure. 40 Button Function Review

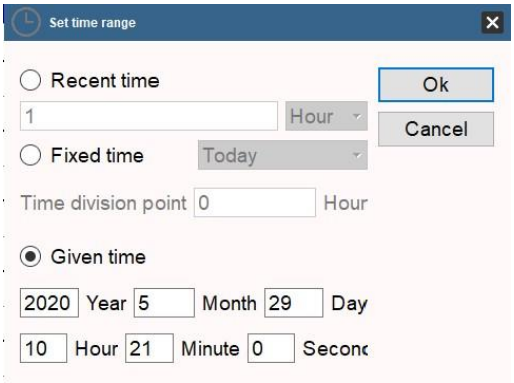


Figure. 41 System Time Setting

5.10. User Management

Click the **User Management** button on the menu bar to Login, Logout, or carry out Administration operations.

Figure. 42 User Management

After Logout, the user can only view the measured values and cannot change any setup parameters.

Click Admin to launch the user management interface, where you can add users, modify passwords, and carry out other operations.

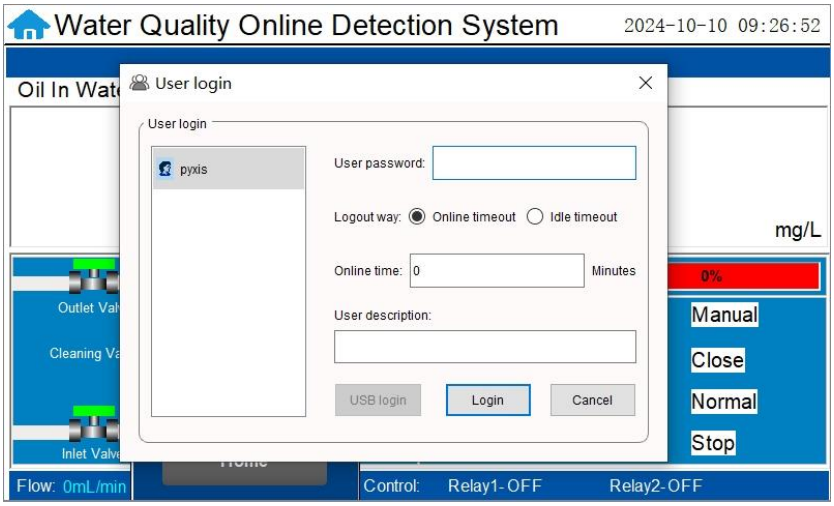


Figure. 43 User Management Interface

Change Password: Select the user to be changed. Then click the Change User button. Enter the user's own password in the User Password column and click Confirm to finish.

5.11. Setting the DATE & TIME

In the main interface, click the time in the upper right corner, the time setting box will pop up, you can change the date and time here

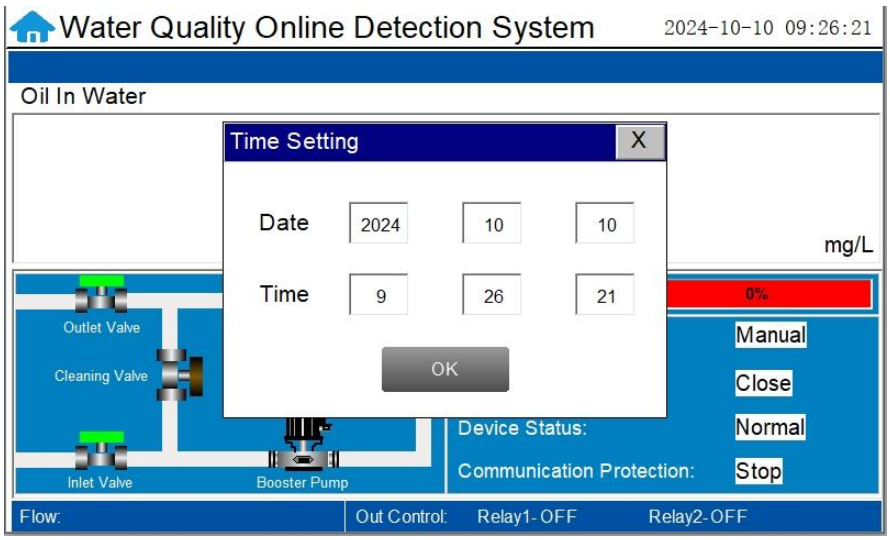


Figure. 44 Time Setting

6. Modbus RTU Register Table

No.	Format	Model	Unit	Note	No.	Format
1	OIW	1	float	Read only	mg/L	Data format: ABCD
2	Sample Flow	3	float	Read only	mL/min	Data format: ABCD
3	Oil In Water ceiling alarm	5	uint	Read only		0: Normal 1: Alarm
4	Oil In Waer lower limit alarm	6	uint	Read only		0: Normal 1: Alarm
5	The communication of the oil sensor in the water is abnormal	7	uint	Read only		0: Normal 1: Alarm
6	PLC communication exception	8	uint	Read only		0: Normal 1: Alarm
7	The communication of the traffic collection module is abnormal	9	uint	Read only		0: Normal 1: Alarm
8	Low Sample Flow	10	uint	Read only		0: Normal 1: Alarm
9	CT420	101	uint	Read only		
10	CT365	102	uint	Read only		
11	CS420	103	uint	Read only		
12	CS365	104	uint	Read only		
13	t420Di	105	uint	Read only		
14	s420Di	106	uint	Read only		
15	t365Di	107	uint	Read only		
16	s365Di	108	uint	Read only		
17	t420	109	uint	Read only		
18	s420	110	uint	Read only		
19	t365	111	uint	Read only		
20	s365	112	uint	Read only		
21	slope	113	float	Read only		
Communication protocol: Standard Modbus-RTU						Communication parameters and station numbers can be modified via **PARAMETERS**
Communication parameters: Baud rate - 19200, data bit - 8, stop bit - 1, parity bit - none						
Station number: 100						
Communication protocol: standard Modbus-TCP						
Communication parameters: IP: 192.168.0.3 (settable); Port: 502						
Station number: 1						

Pyxis

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