pHixIt

pHixIt is a pH monitoring systems through the development of software platforms and IoT devices, that will enable accurate and not complicated measurement of pH. Have transmits data in real-time. And There is also a notification to users via LINE Notify when the pH value changes abnormally. or when summarizing daily information.

Accessories

Indicator lamp

Display

Key Features

- **Ability:** There is a software platform that can monitor the operation of the device in real time, such as measuring pH, temperature, and relative humidity.
- **Easy to use:** User manuals and display screens of the platform software have been prepared to be easy to understand and in Thai language.
- **Easy installation and compatibility:** The solution has been developed in a plug-and-play format. allowing easy connection to other devices or sensors, such as in food and beverage production systems. or in the chemical industry.
- **Customization and flexibility:** Supports customization or additions according to specific requirements such as a weather station sensor, measure the amount of rain, Chlorine sensor, Nitrate sensor, Phosphorus sensor, and Potassium sensor.
- **Strength and durability:** The cabinet material is made of steel. Has a cover and roof for dustproof and waterproof protection.
- **Data Security:** It has an industrial-grade Industrial IoT eSIM (MFF2) chip designed to operate in industrial environments. and can connect to the internet with service provider networks in Thailand It also has an encrypted hardware chip. (CryptoAuthentication) makes data transmission using IoT technology extremely secure and reliable.
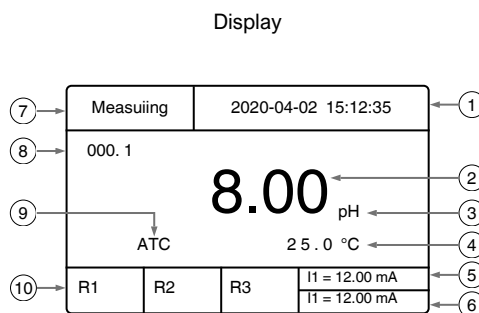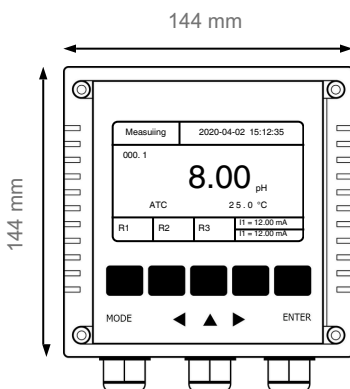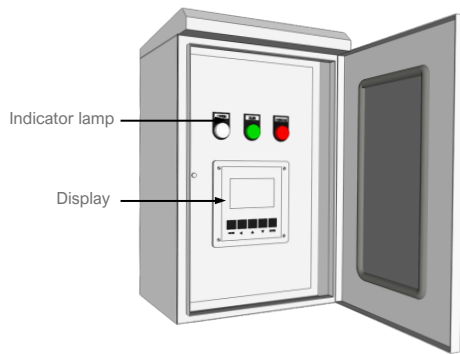
- Microchip ATECC608A
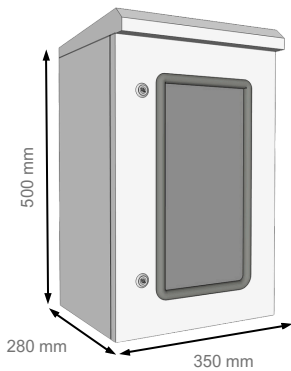- Micro SD card
- USB type C port
- ARM Cortex-M 32-bit
- RS485 / RS232

![SaiJai TECH]

SAIJAI TECH CO., LTD.

pHixIt Solution
BY SAIJAI TECH

40 Lai Unique Thesaban Rangsan Nuea
Road, Ladyao Subdistrict, Chatuchak
District, Bangkok 10900

Contact
- 02-128-0942
- iot@saijai.tech
- www.saijai.tech
- SaiJai Tech
- @saijaitech
- @saijaitech

Overview

Wiring diagram

Power Supply
Circuit breaker
Energy meter
Fuse protection
Main Circuit breaker
Surge protection
Temp & Humidity sensor
Controller

Pilot lamp 220VAC (White)
Pilot lamp 220VAC (Green)
Pilot lamp 220VAC (Red)
Electric Conductivity CONTROLLER
pH Sensor
DO Sensor
EC Sensor

500 mm
280 mm
350 mm

Indicator lamp

Display

Accessories

144 mm

144 mm

Measuiing   2020-04-02 15:12:35
000. 1
8.00 pH
ATC   25.0 °C
R1   R2   R3   I1 = 12.00 mA
                        I1 = 12.00 mA

MODE   ◄ ▲ ►   ENTER

Display

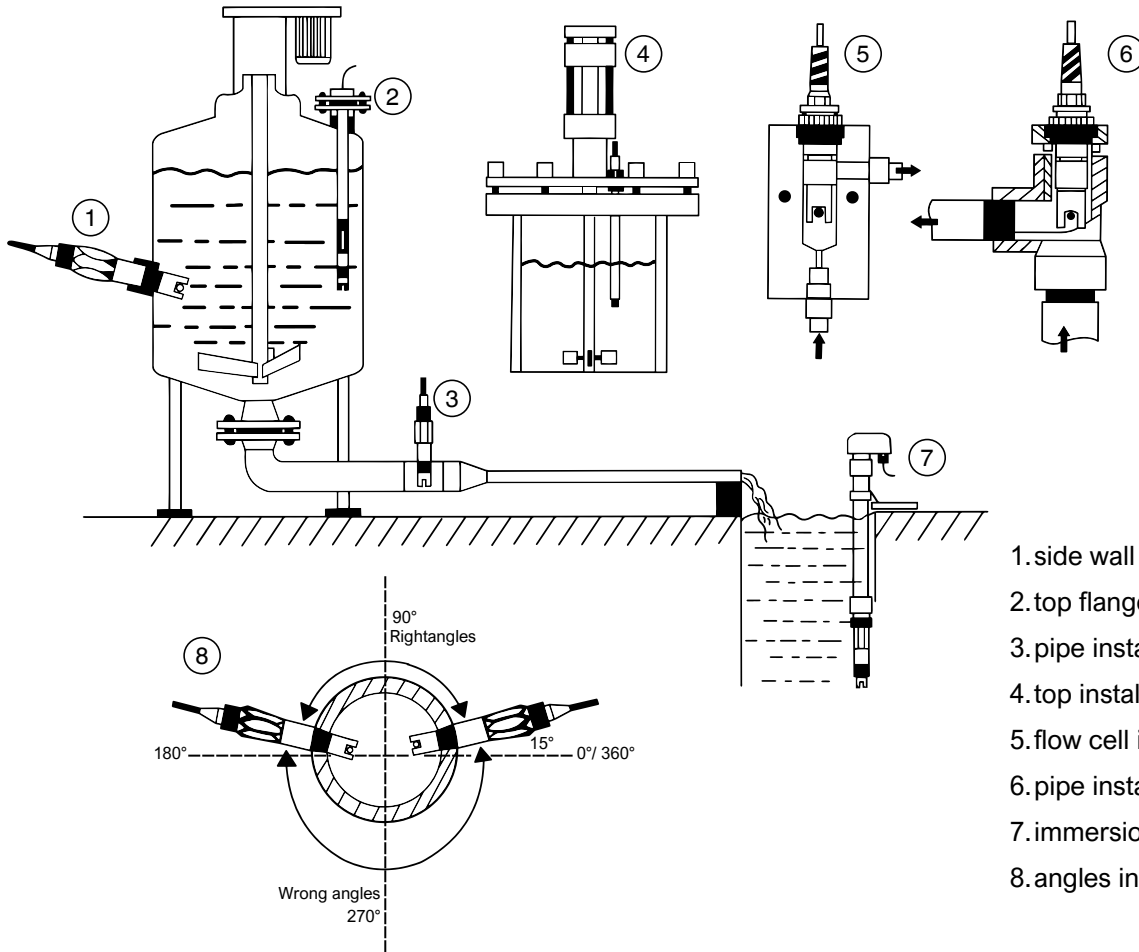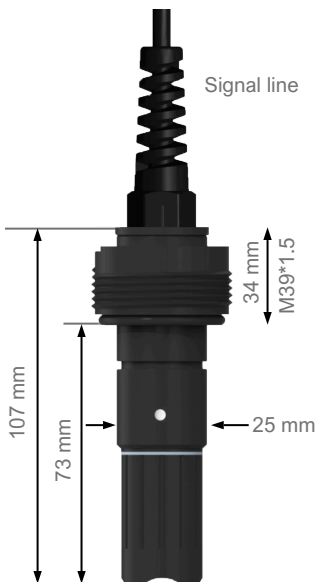|		
7 →	Measuiing	2020-04-02 15:12:35	← 1
8 →	000. 1		
		8.00 pH	← 2 ← 3
9 →	ATC	25.0 °C	← 4
10 →	R1	R2	R3	I1 = 12.00 mA	← 5
				I1 = 12.00 mA	← 6

1. Date and time
2. Main display
3. Unit
4. Temperature and unit
5. First current output
6. Second current output
7. Measurement status and Error indicator
8. Count down timer
9. Temp. compensation: auto(ATC) or manual(MTC)
10. Relay indicator

SaiJai TECH

pHixIt Solution
BY SAIJAI TECH

SAIJAI TECH CO., LTD.
40 Lai Unique Thesaban Rangsan Nuea
Road, Ladyao Subdistrict, Chatuchak
District, Bangkok 10900

Contact
02-128-0942
iot@saijai.tech
www.saijai.tech

SaiJai Tech
@saijaitech
@saijaitech

Overview

Electrode Installation

1. side wall installation
2. top flange installation
3. pipe installation
4. top installation
5. flow cell installation
6. pipe installation
7. immersion installation
8. angles in pipe installation

90°
Rightangles

180° ---- ---- 15° — 0°/ 360°

Wrong angles
270°

Signal line

34 mm
M39*1.5

107 mm

73 mm

25 mm

Potential of Hydrogen Sensor (pH)

Suitable for pH measurement of various substances in medicine, agriculture, wastewater treatment, water quality control in various production processes such as food, beverages, medicine, etc.

SaiJai TECH

pHixIt Solution
BY SAIJAI TECH

SAIJAI TECH CO., LTD.
40 Lai Unique Thesaban Rangsan Nuea Road, Ladyao Subdistrict, Chatuchak District, Bangkok 10900

Contact
📞 02-128-0942
✉️ iot@saijai.tech
🌐 www.saijai.tech
f SaiJai Tech
LINE @saijaitech
X @saijaitech

Product Description

MCU	ARM Cortex-M 32- bit RISC ARM Processor cores
Interface port	RS485 or RS232 isolation with auto-direction (Software mode selection) RS485 or I2C with auto-direction
Indicator lamp	LED Open LED Run LED Overdue
Power supply	24 V
Display	LCD
USB type C port	Program Upload
Case	Aluminium
pH sensor	Technical data • PH range : 0 - 14pH (Resolution : 0.01 pH, Accuracy : ±0.01 pH) • PH balance : 7.00 ± 0.25 • Temperature range : 0.0 - 60°C (Resolution : 0.1°C Accuracy : ±0.3 °C) • Temperature compensation : Automatic • Output : RS485;4 - 20mA • Power supply : DC9 - 30V (Recommend 12V) • Pressure range : 0 - 3bar • Shell material : PPS, ABS • Liquid junction : PTFE • Pipe thread : 3/4, M39* 1.5 • Cable length : 5m or customized • Protection grade : IP68
pH Controller	Specifications • Measuring range : 0.00 - 20.00/0.00 - 2.00 µS/cm • Resolution : 0.01/0.001 µS/cm • Accuracy : ±0.01ppm / ±0.001 µS/cm • Temp. compensation : -10.0 - +130.0°C • Temp. range : -10.0 - 130.0°C • Temp. compensation range : -10.0 - 130.0°C • Storage temp : -20 - 70°C • Display : Back light, dot matrix LCD display • Current output accuracy : ±0.05 mA • Baud rate : 9600/19200/38400 • Relay delay: 0-120 seconds • Data logging capacity : 500,000 • Waterproof grade : IP65
IoT Box Size	H: 500 x W: 350 x D: 280 mm
Weight	18 kg