

[Product Description]

- IoT pH Analyzer: Equipped with both RS-485 and Wi-Fi web interfaces, allowing for remote or on-site monitoring directly via mobile phone. No display unit or app required. Provides accurate and stable pH readings compatible with any global display unit or software.
- Automatic Cleaning Function (Optional): Includes a built-in micro air pump. Cleaning schedule and stabilization time are adjustable. The device automatically holds the last reading during cleaning, effectively extending maintenance intervals.
- Smart calibration function via mobile web interface: Replace the standard liquid bottle with the protective cap on-site, and navigate the calibration process via mobile web interface for ultimate convenience.
- Smart AI Features: Sends notifications for calibration and automatic cleaning status. Automatically detects electrode contamination or aging, ensuring optimal performance.



[Features]

- Integrated Design: Built-in IoT transmission module and sensor; ready to operate upon power-up with all functions pre-installed.
- IP68 Submersible and Corrosion-Resistant Housing: Can be directly submerged in water without the need for protective sleeves.
- High-Strength Isolated Cable: Ready for direct use, with stable signal transmission. Power and IoT communications are protected with surge isolation.
- Temperature Compensation: Measurement method complies with Taiwan EPA's NIEA W218.51C specification for automatic monitoring facilities.
- Smart Design: Calibration parameters are stored internally, allowing for immediate installation on-site after calibration.
- Three-Point Calibration: Supports calibration using standard buffer solutions or samples with known pH values.
- Data Hold During Calibration and Cleaning: Maintains the last reading to avoid false alarms or misoperation.
- Real-Time Status Monitoring: Displays current operating status, including calibration, automatic cleaning, stabilization, or maintenance.
- Calibration Records Accessible via Web and RS-485: Stores the last three calibration records, including date, slope, and calibration points, which can be queried remotely.

[Applications] : Sewage, Seawater, Subterranean water, Aquaculture, River and lake detecting system.

[Optional code] PH485- Code 1 - Code 2 - Code 3

Code 1	Function	Code 2	Sensing end connector	Code 3	Line/Air duct length
N	No auto-cleaning	C	Quick connector	N	3M
A	Auto-cleaning(Including standard 12VDC air pump, nozzle)			C	3 meters + quick connector
A24	Auto-cleaning(Including 24VDC air pump, nozzle)	F	Cable head	Value N	Line length
				Value C	Line length + quick connector

Code 2: Quick connector



Code 2 Cable head



[Technical Specifications]

- RS-485 Modbus RTU. The mobile phone operates with web page(no app).
- Data resolution:16 bit(0.001%F.S).
- Surge protection:8000VDC.
- Protection: polarity 、 overload 、 short circuit.
- Measurement principle : In accordance with EPA declaration method NIEA W425.51C
Using the glass electrode and the reference electrode measures the electrical potential of the sample which obtain the activity of hydrogen ion, and the pH value is indexed by the concentration of hydrogen ions.
- Installation method: submerged · three way · intubation.

[pH Specification]

pH Specification		Temperature Specification	
Measuring range	0~14.00pH	Temperature principle	NTC30K
	Slope reading 70~130%	Measuring range	-10~120°C(ATC)
	Zero potential -50~50mv	Accuracy	±0.2°C
Accuracy	±0.02 pH	Resolution	0.1°C
Resolution	0.01 pH	Reproducibility	0.1°C
Electrode withstand voltage	Max. 100 psi	Other Specification	
Junction	Ring Double Junction	Link above	3/4" NPT
Operating temperature	0~100 °C	Link below	M42
Response time	T90 <5 seconds	Housing Material	PP, acid and alkali resistance/food grade/zero dissolution
		Electrode material	glass
Communication	RS-485Modbus RTU Web Browser direct reading (192.168.1.80)	Dimension	Ø50*L213.9mm
		Weight	≤340kg
		Power	Auto-cleaning:12 or24VDC(optional) Non auto-cleaning:9~36VDC
Safety certification	CE 、 FCC	Power consumption	Auto-cleaning:6.8W Non auto-cleaning :0.8W
		Ingress Protection Rating	IP68

[Dimension]: mm

