

## [Product Description]

- IoT pH analyzer with RS-485 and Wi-Fi web interface, and it can monitor by remote and in-situ with mobile phone which is without meter and app.
- Automatic cleaning function (optional): Including Micro air pump, cleaning scheduling (adjustable), keeping the last reading (during auto cleaning), and stabilization time (adjustable), that is able to extend maintenance period easily.
- Smart calibration function: Switching protective cover to standard solution bottle, and it calibrates with phone webpages.
- Smart AI function: calibration/auto-cleaning notification, self-judgment of stain and electrode degree of aging..etc.
- IP68 integrated design: The pH sensor can put into the application environment such as river/reservoir/tap water/ sewage/ seawater.. etc. Accurate and durable pH value can be provided to any meter or software in the world.



## [Features]

- Integrated design, and built-in IoT transmission and sensor.
- IP68 submerged type and corrosion resistant material which can put into water without protective sleeve.
- It can be operated by delivery of current, and all functions are built-in.
- Ultra-low power consumption, it is suitable for large-scale deployment of green energy IoTs.
- The high-strength isolated cable can be put to use directly, and the signal is stable.
- The PH sensor is equipped with temperature compensation and measurement (in accordance with NIEA W218.51C).
- The power and IoT communication are equipped with surge protection.
- With dual digital communication of RS-485 and Wi-Fi.
- Standard Modbus RTU can connect to the global IoT.
- Wisdom design, storing parameter calibration, it can be installed directly on site after calibration.
- Operating with mobile web pages, it is convenient to on-site operation.
- Switching protective cover to standard solution bottle on site, it is convenient for calibration.
- Equipped with three-point calibration, it can be calibrated using standard solutions or samples with known concentrations.
- During calibration and auto-cleaning, keep the last reading value to avoid misoperation, and it read the state at the same time (calibrating/auto-cleaning/stabilizing/ under maintenance).
- The latest thrice calibration records (date/slope/calibration point) can be inquired.

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

**[Optional code]** PH485-  -

Code 1	Function	Code 2	Line/Air duct length
N	No auto-cleaning	N	3M
A	Auto-cleaning (Including air pump, 5m air pipe, nozzle)	10	10M
A24	Auto-cleaning (24VDC Including air pump, 5m air pipe, nozzle)		

## [ Calibration bottle code]

Name of product	Code
Calibration bottle	Bottle



## [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	±0.1 pH	Resolution	0.1°C
Resolution	0.01 pH	Reproducibility	0.1°C
Electrode withstand voltage	Max. 50 Psig	Other Specification	
Operating temperature	0~60°C	Link above	3/4" NPT
		Link below	M42
Response time	T90 1 second	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	ø45*L214mm
		Weight	≤340kg
		Power	Auto-cleaning:12 or24VDC(optional) Non auto-cleaning:9~36VDC
Safety certification	CE 、 FCC	Power consumption	Auto-cleaning:1.6w Non auto-cleaning :0.8w
		Ingress Protection Rating	IP68

## [Dimension]: mm

