

[Product Description]

- IoT soil pH sensor has dual interfaces of RS-485 and Wi-Fi web pages, which can be directly monitored remotely or on-site with a mobile phone, without the need for a meter or APP.
- Smart calibration function: The protective cap can be directly replaced with a standard liquid bottle, and the calibration process is guided by a mobile web page. On-site calibration is super simple, and remote calibration is also possible.
- Intelligent AI function: calibration/auto cleaning status notification.

[Features]

- Integrated design, built-in IoT transmission and sensors; it can be operated by powering on, and all functions are built-in.
- Ultra-low power consumption, suitable for green energy IoT deployment.
- High-strength isolated cables can be put into use directly, and the signal is stable.
- It has temperature compensation and the measurement method complies with the Environmental Protection Agency' s Automatic Monitoring Facilities Law NIEA W218.51C.
- The power supply and IoT signal have surge isolation protection.
- Equipped with dual digital communication RS-485 and Wi-Fi.
- Standard Modbus RTU protocol can connect to the global Internet of Things.
- Intelligent design, can store calibration parameters, and can be installed directly on site after calibration
- Mobile web page operation, on-site operation is very convenient.
- The on-site protective cover can be replaced with a standard liquid bottle, making calibration extremely convenient.
- Equipped with three-point calibration, which can be calibrated based on standard solution or sample with known concentration.
- During calibration and auto cleaning, the last reading value is maintained to avoid malfunctions and the status (calibrating/ auto cleaning /stabilizing/maintaining) is readable at the same time.
- The latest three calibration records (date/slope/calibration point) can be queried via Web and RS-485.



[Applications] Applications such as soil that require plug-in pH measurement

[spH optional code]

spH485 — Code 1

Code 1	Line length
N	3M
C	3 meters + quick connector
Value	Line length
Value C	Line length + quick connector

[Technical specification]

- RS-485 Modbus RTU, web page without APP, direct operation on mobile phone.
- Data resolution: 16 bits (0.001%F.S).
- Surge protection : 8000VDC ◦
- Protection: polarity, overload, short circuit.
- Installation method: Plug-in

[Soil pH Specification]

spH specification		Temperature Specification	
Measuring range	0~14.00pH	Temp 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. 100 psi	Other Specification	
Operating temp	-5~110 °C	Link above	3/4" NPT
		Link below	M42
Reaction time	T90 1 sec	Housing material	Polypropylene (PP), acid and alkali resistant/food grade/zero dissolution
		Electrode material	glass
Communication	RS-485Modbus RTU Web browser direct reading (192.168.1.80)	尺寸	ø50*L213.9mm
		Weight	≤340g
		Power	9 ~ 36VDC
Safety certification	CE 、 FCC	Power consumption	0.8W
		Waterproof level	IP68

[Dimensions] unit:mm

