JNC pH Sensor pH485

[Product Description]

- The fourth-generation sensor improves the product's applicable range and can be used in high-temperature fields.
- 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: the protective cap can be directly replaced with a standard liquid bottle, and the mobile web-based calibration process makes on-site calibration extremely simple, and remote calibration is also possible.
- 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, built-in IoT transmission and sensors; it can be operated by powering on, and all functions are built-in.
- IP68 submersible corrosion-resistant material, can be directly put into the water without a protective casing.
- 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.
- It has temperature compensation and the measurement method complies with the Environmental Protection Agency's Automatic Monitoring Facilities Law 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 three calibration records (date/slope/calibration point) can be queried via Web and RS-485.

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

[Optional code]   PH485- [Code1] − [Code2]

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

[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 Slope reading 70~130% Zero potential -50~50mv	Temperature principle	NTC30K
		Measuring range	-10~120°C(ATC)
		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	
Operating temperature	-5~99°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	Ø50*L213.9mm
		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

Ø50mm

213.9mm

Ø56mm

70.25mm