# JNC ORP Sensor

# [Product Description]

- IoT ORP 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 ORP 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.



- 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 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.
- With 3-point calibration, and the calibration point can be set.
- 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] ORP485 - Code1 - Code2

Code1	Function	Code 2	Line/Air duct length
N	No auto-cleaning	N	3M
		С	3 meters +quick connector
А	Auto-cleaning (Including air pump, 5m air pipe, nozzle)	Value	Line length
		Value C	Line length +quick connector
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: With potentiometric measurement, and the oxidative or reductive potential are measured by the relative potential of the sample electrochemistry. To provide an accurate data.
- Installation method: submerged · three way · intubation.

## [ORP Specification]

ORP Specification		Temperature specifications	
	-2000~2000mV	Temperature principle	NTC30K
Measuring range	Slope reading 70~130% Zero potential -50~50mV	Measuring range	-10~120°C(ATC)
		Accuracy	±0.2°C
Accuracy	±1mV	Resolution	0.1°C
Resolution	0.1mV	Reproducibility	0.1°C
Electrode withstand voltage	Max. 100 psi	Other Specification	
0	1~99 °C	Link above	3/4" NPT
Operating temperature		Link below	M42
Response time	T90 1 seconds	Housing Material	PP, acid and alkali Resistance / food grade/ zero dissolution
		Electrode material	glass
	RS-485 Modbus RTU Web Browser direct reading (192.168.1.80)	Dimension	ø50*L213.9mm
Response time		Weight	≤340 g
Response time		Power	Auto-cleaning:12VDC or 24VDC(optional)
			Non auto cleaning:9~36VDC
	CE · FCC	Power consumption	Auto-cleaning:1.6w
Safety certification			Non auto-cleaning:0.8w
		Ingress Protection Rating	IP68

### [Dimension]: mm



Calibration bottle