JNC EC Sensor

[Product Description]

- IoT EC 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 EC sensor can put into the application environment such as river/reservoir/tap water/ sewage/ seawater.. etc. Accurate and durable EC 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 EC 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.
- 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.
- Simultaneous display: EC/TDS/Temp value.

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

[Optional Code] EC485 - Code1 - Code2 - Code3

| Code 1 | Function | Code 2 | Line/ air duct length | Code 3 | Measuring range |
|--------|-----------------------------------|---------|-----------------------------|--------|-----------------|
| N | No auto-cleaning | N | 3M | L | 0~20.00 mS/cm |
| | | С | 3 meters + quick connector | | 0~200.00 mS/cm |
| А | Auto-cleaning (Including standard | Value | Line length | Н | |
| | 12VDC air pump, nozzle) | | Line length+quick connector | | |
| A24 | Auto-cleaning (Including 24VDC | Value C | | | |
| | air pump, 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 \(\cdot \) overload \(\cdot \) short circuit.
- Measurement principle: : In accordance with EPA declaration method NIEA W204.51C, Graphite electrodes measure impedance to calculate conductivity.
- Installation method: submerged \cdot three way \cdot intubation.

[EC Specification]

| EC Spe | ecification | TDS | Temperature Specification | | |
|-------------------|---|---------------------------------|---------------------------|--|--|
| | L: 0~20mS / cm | | Temperature principle | NTC30K | |
| Measuring range | H: 0~200mS / cm | L : 12800mg/L H : 128000mg/L | Measuring range | -10~120°C(ATC) | |
| | Slope:70~130% | | Accuracy | ±0.2°C | |
| Accuracy | ±1% F. S | ±1% F. S | Resolution | 0.1°C | |
| | 0.01 ms | | Reproducibility 0 | | |
| Resolution | redundancy±1% | ±0.1 mg/L | | 0.1°C | |
| | reading | | | | |
| Electrode | Max. 100 Psig | | Other Specification | | |
| withstand voltage | | | | | |
| Operating | 0~70°C | | Link above | 3/4" NPT | |
| temperature | | | Link below | M42 | |
| | | | Haveine Material | PP, acid and alkali resistance/food | |
| Response time | T90 1 second | | Housing Material | grade/ zero dissolution | |
| | | | Electrode material | Graphite | |
| | RS-485Modbus RTU Web Browser direct reading(192.168.1.80) | | Dimension | ø45*L214mm | |
| Communication | | | Weight | ≤340kg | |
| Communication | | | Power | Auto-cleaning :12VDC or24VDC(optional) | |
| | | | | Non auto-cleaning:9~36VDC | |
| Cofet | CE · FCC | | Power consumption | Auto-cleaning:1.6w | |
| Safety | | | | Non auto-cleaning:0.8w | |
| certification | | | Ingress Protection Rating | IP68 | |

[Dimension]:mm



Calibration bottle