

# SEMARS DIGITAL

## SEMARS

Smart Equipment Monitoring  
and Resolution System

## SENSORS DATA SHEET

## SEMARS DIGITAL

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**UAE** : FDRK5907, Compass Building, Al Hamra Ind Zone-FZ, UAE

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# Table Of Contents

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## Sensors

01. Water Quality Temperature
02. Description
03. Key Features
04. Applications
05. Specifications
06. Notes
07. Cautionary Notes
08. Certifications

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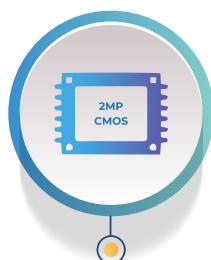
## Water Quality Temperature Sensors

A robust and high-accuracy device designed to measure water temperature in real time for environmental, industrial, and municipal applications. Plays a critical role in water quality monitoring, as temperature influences chemical reactions, biological activity, and dissolved oxygen levels. Built with a corrosion-resistant, waterproof housing (IP65/IP67), suitable for continuous immersion in harsh conditions.



Its features and applications are as follows:

### 1.1 Key Features:



**Built-in Pt100 or NB-IoT connectivity with excellent thermal compensation for temperature compensation in pH/ORP sensors**  
Reduces operating costs



**LoRaWAN, Ethernet, Wi-Fi**

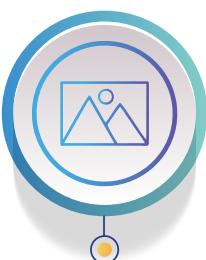


**Variety of wiring options**



**Supports harsh environments and pressurized lines**

Fast response time



**Connects to transmitters for digital output and gateways**

Manageable via Semars Cloud

### 1.2 Applications:

- Drinking Water Treatment
- Wastewater Treatment Plants
- Aquaculture & Fisheries
- Environmental Monitoring
- Industrial Processes

- Food & Beverage Industry
- Swimming Pools & Recreational Facilities
- Research & Laboratory Applications

This type of sensor is particularly suitable for industrial or commercial environments requiring precise monitoring and integration with existing systems.

## 1.3 Specifications

SL No.	Specification	Value
1	Measurement Principle	Measures flow, pressure, and temperature in potable water systems
2	Connectivity	NB-IoT connectivity (LTE Cat Nb1), 4G LTE
3	Power	Battery-powered (up to 10 years), renewable, or AC mains
4	Integrated Sensors Range	-20 °C to 140 °C
5	Integrated Sensors Accuracy	±0.3 °C
6	Temperature Range	-30 °C to +75 °C
7	IP Rating	IP68 (submersion up to 10 m)
8	Physical properties	Built with a rugged, waterproof housing (IP65/IP67), the sensor is suitable for continuous field deployment

## 1.4 Note:

## Operating and storage conditions :

- Operating Temperature: 0 °C to +50 °C (32 °F to 122 °F)
- Operating Pressure: Up to 10.3 bar (150 psi)
- Temperature range: 0 °C to 50 °C
- Accuracy: ±0.1 ppm (0–8 ppm), ±0.2 ppm (8–20 ppm), ±10% of reading (20–50 ppm)
- Storage Temperature: -5 °C to +60 °C (23 °F to 140 °F)
- Humidity: Keep dry, avoid condensation
- Chemical Handling: Store reagents away from heat and temperature extremes; powders kept dry

## Certifications :

- CE Certified
- RoHS Compliant
- IPV6 Packing
- ISO 9001 Manufacturing Standards