SEMARS DIGITAL

SEMARS

Smart Equipment Monitoring and Resolution System

SENSORS
DATA SHEET

SEMARS DIGITAL

India : MSR North Tower, 16th Floor, MS Ramaiah North City, Manyata, Bengaluru - 560045

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

Oman : OFC 2/16, Focus Business Center, Way56, Muscat, Oman

Netherlands : 23-Aramstraat, 1336 HR, Almere, Netherlands

Contacts : info@semarsdigital.com | https://semarsdigital.com

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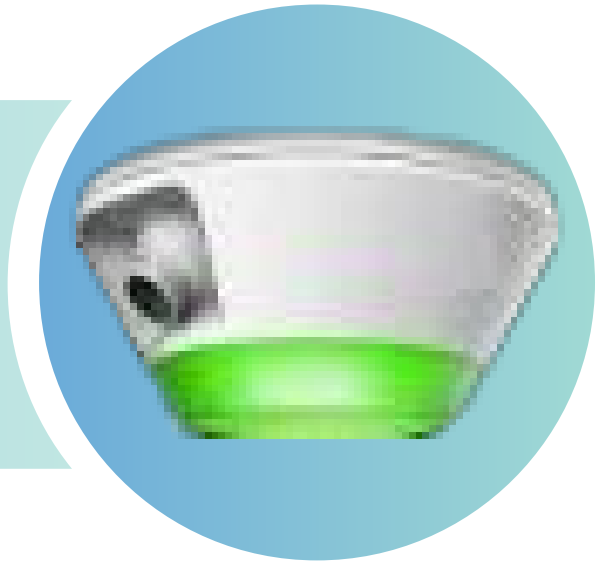**Oman :** OFC 2/16, Focus Business Center, Way56, Muscat, Oman
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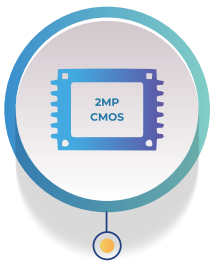**Contacts :** info@semarsdigital.com | https://semarsdigital.com

01

Parking Sensors

Advanced proximity detection devices designed to assist drivers in safely maneuvering vehicles during parking. Use ultrasonic technology to detect obstacles around the vehicle and provide real-time alerts to prevent collisions. High detection accuracy, weather-resistant design, and wide operating temperature range, ensuring reliable performance in diverse environments.

Its features and applications are as follows:

1.1 Key Features:

ToF-based parking occupancy detection	**NB-IoT connectivity with excellent penetration and coverage**	**Protocol stack: IPv4/IPv6, UDP, CoAP, LwM2M, DTLS, TCP, MQTT**	**Vehicle Count**	**Real-time data for smart parking management**
Ultrasonic/ToF distance measurement with parking mode	LoRaWAN, Ethernet, Wi-Fi	OTA firmware upgrade capability	Real Time	Manageable via Semars Cloud

1.2 Applications:

- **Passenger Vehicles**
- **Commercial Vehicles & Trucks**
- **Public Parking Lots & Garages**
- **Public Parking Lots & Garages**
- **Automated Parking Systems**

- **Electric Vehicle Charging Stations**
- **Fleet Management**
- **Smart Cities**
- **Airports & Large Complexes**

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	Technology	NB-IoT ,LoRaWAN,LTE M
2	Bands	NB-IoT bands vary by region
3	Work Mode	Standard NB-IoT protocols
		Ultrasonic / ToF
		Detects vehicle presence
		0.3 m to 4 m

1.4 Note:

Operating and storage conditions :

- -20 to 70 °C

- 0–95% (non-condensing)

Certifications :

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