

# SENSIT IR Flush Mount

wireless smart parking sensor

## Key features:

- ✓ dual detection technology (infrared and magnetic)
- ✓ flush mount installation (snowplough resistant\*)
- ✓ 5-10 years battery life
- ✓ communication via fast and reliable network
- ✓ real-time bidirectional communication
- ✓ easy data integration using the SENSIT Interface Software

The SENSIT IR Flush Mount sensor is a smart parking sensor that detects the occupancy of individual outdoor parking spaces in real-time, using dual detection technology (infrared and magnetic). As part of SENSIT platform, the SENSIT IR Flush Mount optimizes parking utilization, reduces emissions and guarantees a fast return on investment.

The SENSIT IR Flush Mount is installed fully flushed in individual parking bays, making the sensor resistant to snowploughs\* and reducing tripping hazards. With a battery lifetime of 5-10 years (depending on the application type), the in-ground SENSIT sensors have proven to be a reliable and durable parking detection solution.

Typical applications with the SENSIT IR Flush Mount sensor include on-street parking, truck and bus parking and installations that require snowplough resistant\* sensors with the highest possible detection accuracy.

## Highly accurate detection

The weather proof SENSIT IR Flush Mount features earth magnetic field and infrared detection. This dual detection technology ensures highly accurate vehicle detection. A sophisticated algorithm ensures the detection is not affected by snow, dirt or leaves covering the sensor.

## Fast and reliable communication

A unique feature of the sensor is its capability to communicate wireless within a self-healing mesh network. Using a fast and reliable network of repeaters (SENSIT Relay Node) and gateways (SENSIT Gateway), the SENSIT IR Flush Mount sends real-time parking data to the cloud server (SENSIT Interface Software).



Additionally, the ability to communicate bidirectionally ensures that the SENSIT Interface Software can easily request and verify the latest sensor events and status updates.

## SENSIT interface Software

Using the SENSIT Interface Software API, occupancy data can be easily integrated into third party parking guidance systems, parking enforcement software or smartphone apps. The SENSIT Interface Software (SIS) forms the basis for additional services and functions such as data analysis, planning and management of e.g. loading/ unloading, truck and disabled parking spaces.

## SENSIT platform

Nedap's wireless SENSIT IR Flush Mount sensors detect the occupancy of individual parking spaces in real-time. The obtained parking data enables smart parking in any Smart City, ITS (Intelligent Transportation Systems) or retail environment. The SENSIT platform is specifically designed for:

- **Guidance:** guiding cars, busses and trucks to available parking bays fast and efficiently.
- **Enforcement:** providing real-time data and alerts to monitor the (ab)use of single parking bays.
- **Retail:** improving the shopping experience by guiding customers to the nearest available parking bay.

Different types of ruggedly designed sensors are available to accommodate any installation in indoor car parks, on-street spaces and road surfaces.

Technical information	SENSIT IR Flush Mount
Part number	9221166 SENSIT IR Flush Mount EU 9221174 SENSIT IR Flush Mount AU 9221182 SENSIT IR Flush Mount US
Dimensions	Ø 78 mm (3,07 in) x 72 mm (2,83 in)
Mounting dimensions	Ø 78 mm (3,07 in) x 72 mm (2,83 in) - fully flushed into the floor
Color	Black
Weight	350 gram (12.35 oz)
Protection class	IP68, completely sealed Housing
Material	Polyethylene (PE)
Operating temperature	-40 ... +85°C (-40...+185°F)
Storage temperature	-40 ... +85°C (-40...+185°F)
Relative humidity	100% relative humidity
Operating frequency	868 MHz (EU) 902 – 928 MHz (US) 915 – 928 MHz (AU)
Battery	Built in lithium battery
Expected battery life	5-10 years (under normal usage and normal circumstances / dependent on the environment)
Snowplough resistant	Yes*
Load resistance	Heavy traffic
Detection	Magnetic and infrared
Detection height	0 - 90 cm (0 - 35.5 in)
Communication distances	<ul style="list-style-type: none"> <li>• Sensor to Relay Node (directional) - max. 50 meters (164 ft)</li> <li>• Sensor to Relay Node (omni-directional) - max. 35 meters (135 ft)</li> <li>• Sensor to Gateway - max. 25 meters (82 ft)</li> </ul>
Required Relay Nodes	Car parks: 1 per 50 sensors / On-street parking: 1 per 25 sensors (estimated)
Standards	CE, FCC, IC, ACMA
*Disclaimer	<p>Please note that improperly adjusted snow plows or other alike vehicles will cause critical or terminal damage to roadways, parking surfaces and sensors. When electronic devices like SENSIT sensors are installed please be extra cautious. Every effort should be made to properly adjust the snow plow blade to appropriate settings and heights so as not to cause damage to these items. Snow plows with plastic or rubber cutting edge scrapes are recommended for use in these installations. The product warranty on SENSIT sensors voids if scraping damage is visible on the SENSIT sensor surface.</p>
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