

# SENSIT

## | Wireless vehicle detection sensors



### KEY FEATURES:

- Self-healing network
- Extreme accurate detection
- Dual detection technology
- Easy installation into any parking bay
- Vandal resistant installation
- Resistant to snow ploughs

Nedap's wireless vehicle detection sensors efficiently measure occupancy of individual parking spaces without complex or time consuming installation.

The wireless vehicle detection sensors are installed in each parking space. The system is based on a self healing wireless mesh network of vehicle detection sensors designed to detect vehicle presence in individual parking bays.

### Wireless detection and communication

The unique feature of the sensors is its capability to communicate wireless with each other. Easy installation of the wireless space count sensors is guaranteed. Once installed no maintenance is required for years. The actual status (occupancy) of the sensor is transmitted to the Relay Node, which is part of the wireless mesh network.

### Earth magnetic field and resistant detection

The SENSIT sensors features earth magnetic field and infrared detection. The combined detection effectively detects vehicles using a sophisticated algorithm to ensure detection is invulnerable to snow, dirt and leaves.

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

### Applications

The system facilitates accurate measurement on occupancy of individual parking bays. This information can be used to guide traffic to free parking spaces but can also be used for on-street parking enforcement and overstay detection.

### SENSIT IR

Vehicle detection sensor featured with dual detection technology allowing for vandal resistant installation into a parking space.

- dual detection (infrared and earth magnetic field)
- vandal resistant mounting

### SENSIT Surface Mount

Vehicle detection sensors designed for car parks where drilling is not allowed. The sensor can easily be glued onto the surface. Replacement can be achieved easily by removing the sensor installed in the mounting ring.




- dual detection technology
- no drilling, easy installation
- suitable for car parks and rooftop parking

### SENSIT Flush Mount

Vehicle detection sensor for flush mount installation with the road surface. The new flush mount sensor offers an improved detection algorithm. The sensor is resistant to snow ploughs.

- earth magnetic detection
- snowplough resistant
- vandal resistant mounting

# SPECIFICATIONS

Technical information	SENSIT IR	SENSIT Surface Mount	SENSIT Flush Mount	
Product				
Operating frequency	868 – 868.6 MHz (Europe) 902 – 928 MHz (US) 915 – 928 MHz (AUS)	868 – 868.6 MHz (Europe) 902 – 928 MHz (US) 915 – 928 MHz (AUS)	868 – 868.6 MHz (Europe) 902 – 928 MHz (US) 915 – 928 MHz (AUS)	
Detection	Magnetic and IR	Magnetic and IR	Magnetic	
Mounting	Into the floor	Glued onto the floor	Into the floor, flush with the surface	
Snowplough resistant	Partial (rubber blade only)	Partial (rubber blade only)	Yes	
Load resistance	Heavy traffic	Regular traffic	Heavy traffic	
Mounting dimensions	Ø 78 mm [3.07 in] and 53 mm [2.09 in] high in the floor	Mounting ring: Ø 240 mm [9.45 in] Sensor: Ø 167 mm [6.57 in] and 35 mm [1.38 in] high	Ø 78 mm [3.07 in] and 72 mm [2.8 in] into the floor fully flush with the road surface	
Weight	365 gram [12.87 oz]	455 gram [16.05 oz]	350 gram [12.35 oz]	
Protection	IP67, completely sealed Housing PE	IP67, completely sealed Housing PE	IP67, completely sealed Housing PE	
Colour	Default black (optional yellow)	Sensor black Mounting ring yellow or black	Default black	
Operating temperature	-40 ... +85°C [-40...+185°F]	-40 ... +85°C [-40...+185°F]	-40 ... +85°C [-40...+185°F]	
Storage temperature	-40 ... +85°C [-40...+185°F]	-40 ... +85°C [-40...+185°F]	-40 ... +85°C [-40...+185°F]	
Detection height	0 ... 90 cm [0 ... 35.5 in]	0 ... 90 cm [0 ... 35.5 in]	0 ... 90 cm [0 ... 35.5 in]	
Communication range	<ul style="list-style-type: none"> <li>• Sensor to Relay Node 2G (directional) max. 50 meters [164 ft]</li> <li>• Sensor to Relay Node 2G (omni-directional) max. 35 meters [135 ft]</li> <li>• Sensor to Data Collector max. 25 meters [82 ft]</li> <li>• Relay Node to Relay Node (2G) max. 100 meters [328 ft]</li> <li>• Relay Node 2G to Data Collector max. 10 meters [33 ft]</li> </ul>	<ul style="list-style-type: none"> <li>• max. 50 meters [164 ft]</li> <li>• max. 35 meters [135 ft]</li> <li>• max. 25 meters [82 ft]</li> <li>• max. 100 meters [328 ft]</li> <li>• max. 10 meters [33 ft]</li> </ul>	<ul style="list-style-type: none"> <li>• max. 50 meters [164 ft]</li> <li>• max. 35 meters [135 ft]</li> <li>• max. 25 meters [82 ft]</li> <li>• max. 100 meters [328 ft]</li> <li>• max. 10 meters [33 ft]</li> </ul>	
Required Relay Nodes (estimated)	Car parks: 1 per 50 sensors On-street parking: 1 per 25 sensors	Car parks: 1 per 50 sensors On-street parking: 1 per 25 sensors	1 per 25 sensors	
Power supply	Built in lithium battery	Built in lithium battery	Built in lithium battery	
Expected lifetime	5-10 years*	5- 9 years*	5-10 years*	
Part numbers	<b>SENSIT IR (black)</b> 9943374 EU 9898620 US 9965955 AU	<b>SENSIT IR (yellow on request)</b> 9898344 EU 9955909 US 9965947 AU	<b>SENSIT Surface Mount</b> 9958525 EU 9958533 US 9963871 AU	<b>SENSIT Flush Mount black)</b> 9966960 EU 9966978 US 9966986 AU
Documentation	SENSIT_InstallGuide			
Document version nr.	v4.3			

\* under normal usage and normal circumstances and dependent on communication settings