# RELAY NODE 2G \*

### Communication repeater for SENSIT sensors



#### **KEY FEATURES:**

- Fast communication network
- Self-healing network
- Easy mounting onto a pole
- No wiring require

#### **PRELIMINARY**

Relay Node 2G allows for communication increase and ensures a robust and reliable communication network. It ensures fast transmission of event messages from the vehicle detection sensors to the Data Collector.

#### Wireless communication

Relay Node 2G is a fully wireless unit, ensuring easy installation onto lampposts. Once installed, no maintenance is required for years.

#### **Self-healing network**

The SENSIT sensors follow multiple communication paths ensuring a self-healing network.

#### **Mounting instructions**

The relay node mounting bracket fits any pole. It can also be mounted onto a wall.

#### Installation

Relay Node 2G should be mounted preferable at about 3 – 6 meters [10-20 ft] from the floor (eg. onto a lamppost) to allow for visible view of the sensors. The relay node shall visually see the sensors at an angle, see the figure 1.

#### **Guidelines**

On-street: 1 relay node required per 20 sensors\* Off-street: 1 relay node required per 40 sensors\* Depending on local situations

Figure 1 shows information on position of the Relay Node 2G RN-A is the proper location for the Relay Node.

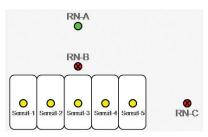


Figure 1: Relay Node position



Figure 2: Relay Node A in figure 1 side view



Figure 3: Relay Node B in figure 1 side view



## **SPECIFICATIONS**

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|--------------------------------|---|
| Technical information          | Relay Node 2G   |
| Weight                         | 365 gram, [12,87 oz]  |
| Protection                     | IP65, completely sealed Housing ASA and Alu   |
| Colour                         | Grey RAL7016 and RAL 9006 Alu   |
| Mounting                       | Onto a pole or wall, metal mounting bracket included  |
| Suggested mounting height      | 3 – 6 meters [10 -20 ft] from the floor onto a lamppost or pole see for more information Relay Node_InstallGuide  |
| Pole dimensions                | Min. Ø 40 mm [1.57 in]<br>Max. Ø 150 mm [6 in]  |
| Wall mounting                  | With bracket using 4 screws   |
| Operating temperature          | -40 +85°C [-40+185°F]   |
| Storage temperature            | -40 +85°C [-40+185°F]   |
| Communication distances        | Data Collector – Relay Node 2G max. 35m [135 ft] omnidirectional, 50 m [164 ft] directional.  Data Collector IP65 GRPS - Relay Node 2G max. 10m [33ft] Relay Node 2G – Relay Node 2G max. 100m [328 ft] Relay Node 2G – SENSIT max. 35 m [135 ft] omnidirectional, 50 m [164 ft] directional* |
| Power supply                   | Replaceable lithium batteries with expected lifetime of 5-7 years #   |
| Part nr.                       | 9212884 Relay Node 2G EU<br>9212892 Relay Node 2G US<br>9212906 Relay Node 2G AU  |
| Document version nr.           | 4.1   |
| * Dependent on the environment |   |

<sup>#</sup> Under normal usage and normal circumstances