



Wireless magnetic detector

The LOMAG sensor is based on the earth magnetic field detection which is modified when a vehicle passes by. It can be used to count and detect the vehicle's presence in roads and parking lots. The detectors have to be installed under the ground at a maximum depth of 15 cm.

People and other objects that doesn't interfere with the magnetic field are not detected. The detector is equipped with Lithium batteries and can achieve 5-8 years autonomy depending on the number of transmissions to be done.

A special feature of the LOMAG sensor is the possibility to set the sensitivity for each of the 3 axes allowing adapt the detection area to the dimension of the parking space. The algorithms of the sensor are designed to continuously detect the presence of vehicles and to filter magnetic interference of any kind.

The configuration of the sensor can be done through the LOGAT Lora gateway. It is possible to configure the sensor output (digital presence or analog magnetic value on the three axes), sensitivity and communication period.



LOMAG-01



Axes number	3
Transmission frequency	868,5 MHz
Power autonomy	5-8 years
Weight	1 Kg.
Power supply	1 or 2 Lithium batteries
Communication distance	150 m (in-ground install.)
Protection	IP68
Dimension	5 (h) x 8 x 9 cm
Operating Temperature	-20°C +50°C

Wireless gateway

Wireless networks are formed around a Gateway, which acts as the wireless network master device, and one or more Nodes (magnetic detectors). The communication between gateway and magnetic detectors is based on the Lora technology which is long range and low power. The gateway communicates with a maximum of 150 wireless detectors. The data received from the detectors can be retrieved on the gateway using Modbus protocol on a RS485 line. The LOGAT gateway has also several digital outputs that can be used to show the status of some detectors.

