

## Microtech Designs Commercial e-loop

The Microtech Designs Commercial Wireless Vehicle Detection System uses magnetometer sensors to detect the presence of oncoming vehicles. These detections are transmitted to a nearby Microtech transceiver for gate activation. The sensors are installed on the surface of entry or exit passages using dynabolts, contain four replacable Lthium batteries, and can withstand almost any vehicle.

**Note:** Gate or door controller must have a dedicated open input and autoclose function enabled.



## Functions / Features

### Lower power consumption

### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

### Fast and simple installation

- Quick non-permanent installation

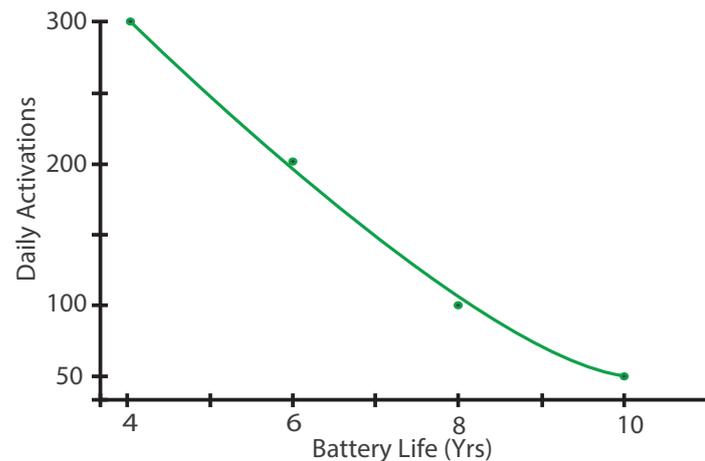
### Up to 10 year battery life

- Compact design
- Compatible with various gates

### Reliable radio communications with trasceiver

- Reliable radio communication
- High security 128-Bit AES Encryption

Battery Life vs Daily Activations



Note: Battery life is dependant on many factors, including daily activations, time used per activation, radar range and external conditions.

## Radio Specifications

Frequency	433.39 MHz
Modulation	FSK
Bitrate	9.6 kbps
Bandwidth	250 kHz
Antenna Type	PCB
Nominal Output Power	10 dBm
Receive Sensitivity	-126.2 dBm
Security	128-Bit AES Encryption
Spurious Emmissions	<ul style="list-style-type: none"> <li>• 30 - 1000 MHz: &lt; -56 dBm</li> <li>• 1 - 12.75 GHz: &lt; -44 dBm</li> <li>• 1.8 - 1.9 GHz: &lt; -56 dBm</li> <li>• 5.15 - 5.3 GHz: &lt; -51 dBm</li> </ul>

## Compliance

Safety	Tested to CE Approval
EMC	<p>Tested to:            EN 301 489-1 V2.2.3 "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services;            Part 1: Common technical requirements;            Harmonised Standard for ElectroMagnetic Compatibility"            Including            a)_Emissions to EN 55032 "Electromagnetic compatibility of multimedia equipment".            b)_ Transmitter and receiver test to EN 300 220-1 V3.1.1 'Short Range Devices (SRD) operating in the frequency range 25MHz. to 1000MHz; Part 1: Technical Characteristics and methods of measurement."            c)_Immunity Tests to EN 301 489-1</p>

## Power, Physical and Environment

Power	4 * 3.6 V 2700ma
Dimensions	220*220*26mm
Weight	1000g
Environment	<ul style="list-style-type: none"> <li>• designed for above ground mounting</li> <li>• IP68 ingress protection</li> </ul>
Operating Temp	-40° to 80° C
Standby Power	14µA
Activation Power	50mA

Magnetometer Detection Areas

