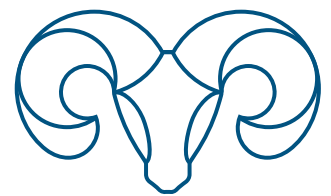


# EVOLOOP



**ALPHATRONICS**  
innovators in access technology

# SMART DETECTION FOR OPTIMAL RECOGNITION

The EVOLOOP is the alternative to induction loops and photocells, replacing heavy work with smart solutions. Thanks to its 140° field of view, you can independently configure up to 3 virtual loops for your application. The EVOLOOP can not only activate the opening and closing of the barrier but also trigger ticket and license plate recognition systems. Moreover, it protects both vehicles and pedestrians (EN 12453 type D) by reducing the risk of contact with the barrier in all environments and conditions



- Plug & go, no more heavy and time-consuming road works
- Can be installed on all types of barriers with skirt or pendulum support
- Position the field of view (-20° to +20°) without accessory
- Automatic analysis of the environment with preconfigured loops
- Intuitive configuration of each virtual loop via app
- Robust accessories to prevent tampering in sensitive environments

Technical specifications	
<b>Technology</b>	FMCW, MoWa inside (microwave 60GHz)
<b>Mounting height</b>	30 cm to 70 cm measured from the road (looking horizontally)
<b>Max. detection field</b>	Up to 7 m
<b>Radar field of view</b>	140° opening field and 40° in elevation
<b>Antenna angle adjustment</b>	-20° to +20 ° (without accessory)
<b>Supply voltage</b>	12-30Vdc ±10% / 12-24Vac ±10%
<b>Power consumption</b>	< 3 W
<b>Outputs</b>	2 electronic relays (galvanic isolated - polarity free) 1 relay
<b>Test input</b>	1 optocoupler (galvanic isolated - polarity free)
<b>Dimensions</b>	50 mm x 150 mm x 68 mm (form factor)
<b>Protection degree</b>	IP65 (IEC/EN 60529)
<b>Temperature range</b>	-25°C to +55°C ; 0-95% relative humidity, non-condensing
<b>Bluetooth</b>	operating bandwidth: 2402MHz - 2480MHz maximum transmitted power: 12dBm
<b>Conformity</b>	EN12453 (type D)
<b>Warranty</b>	1 year
<b>Article number</b>	4-050503-0013-000

## ACCESSORIES



Protective cover /  
metallic cover  
4-050503-0014-000



Bracket  
4-050503-0015-000



Housing  
4-050503-0016-000



Bracket & housing  
4-050503-0017-000

## Plug & Go

No more dusty road works with noisy and heavy equipment. Enjoy an installer-friendly, clean and time-saving experience with EVOLOOP. Just mount the sensor, plug it and launch a teach-in. Ready to go!



## Connect & set

Via mobile app, start a simple teach-in and setup 2 preconfigured loops in no time. If needed, configure up to 3 virtual loops independently to fit the application's needs. Choose the loop type, target type and add a sense of direction to filter out cross-traffic.



## Versatile solution

The EVOLOOP adapts to all applications. Whether you need to setup a paid parking system or need protection against collision with the boom, the EVOLOOP has it covered. It can be installed on all types and lengths of barriers, even with skirt or pendulum support.

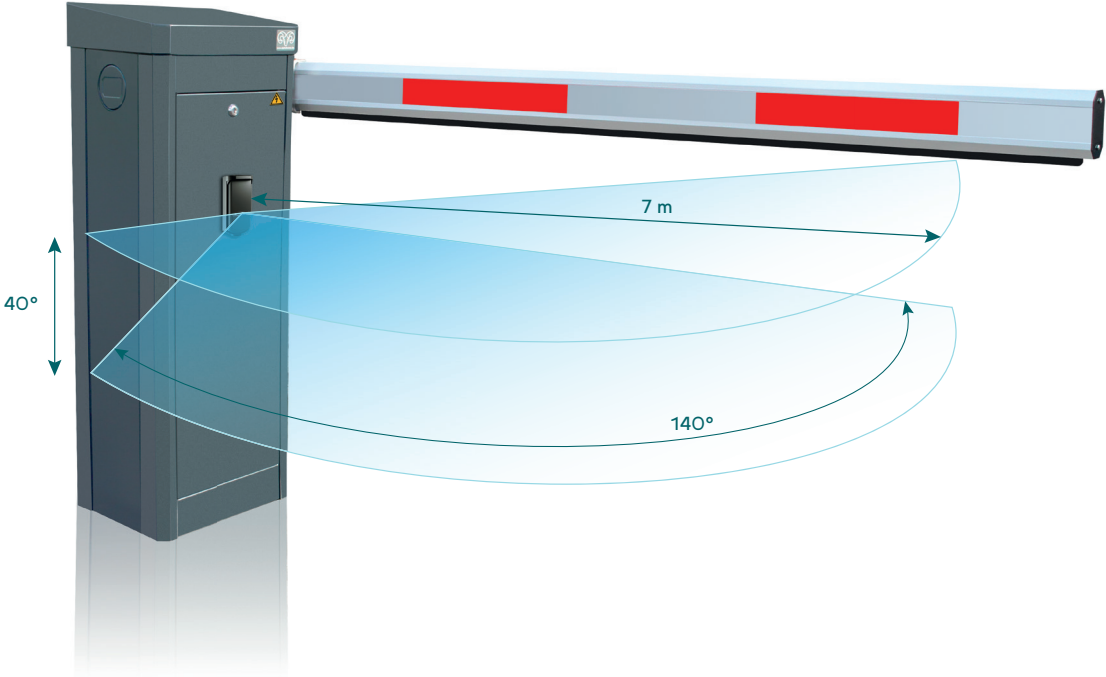


## In any weather, at any time

The EVOLOOP can be installed year-round in any weather. Its virtual loops are reliable and resistant to extreme conditions such as fog, heavy rain, frost, or snow.

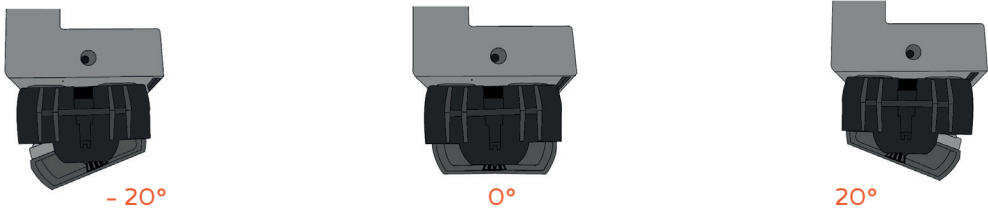


# DETECTION FIELD

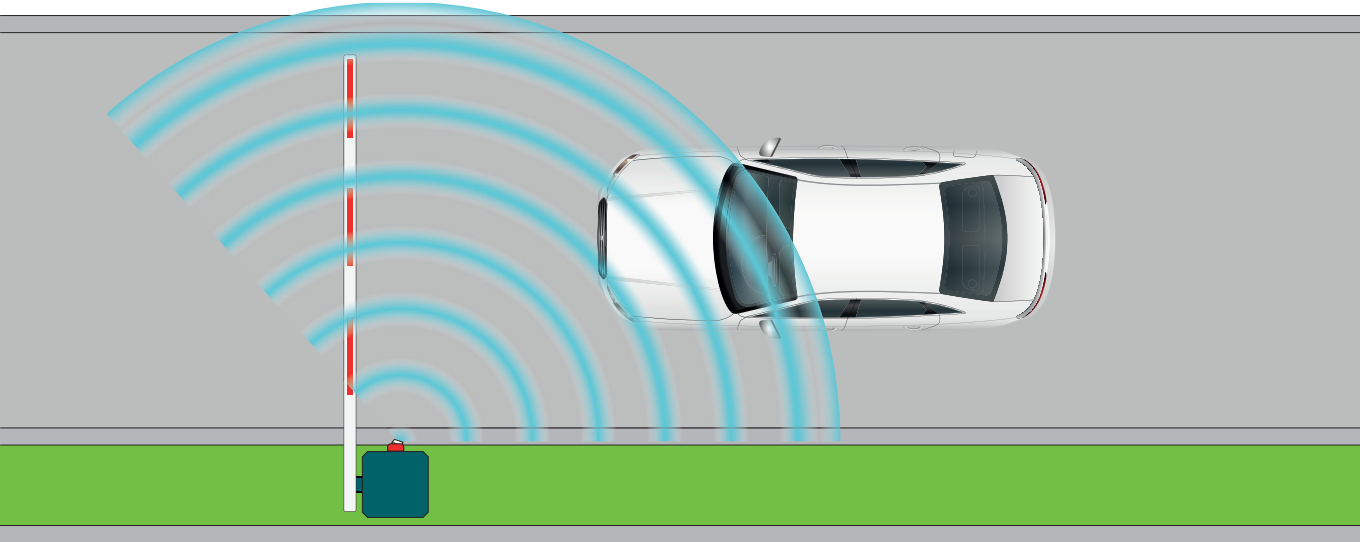


## Rotate the sensor

Depending on the mounting position and the traffic flow direction you can rotate the sensor.



## Example



## VEHICLE DETECTION COMPARE

In addition to EVOLOOP, several technologies are available for vehicle detection, such as radar detection, loop detection, laser sensors, and photocells.

Each technology has its own unique characteristics and applications.

The comparison table below outlines these popular vehicle detection technologies with their advantages and disadvantages, helping you determine the best fit for your specific needs.

	Radar AX4 (79GHz)	Loop detection	Laser Sensor	Photocell	Evoloop
<b>Purchase cost</b>	Low	Low	High	Low	Medium
<b>Installation cost</b>	Low	High installation cost due to grinding in road surface	Low	High	Low
<b>Maintenance</b>	Low maintenance due to no moving parts	Low maintenance due to no moving parts. The evolution of the road surface (cracks, subsidence) can affect the operation	Not maintenance-free due to presence of moving parts	Not maintenance-free due to sensitivity adjustment and need for cleaning	Low maintenance due to no moving parts
<b>Configuration</b>	Easy configuration via Smartphone APP	Easy configuration via DIP switches on the loop detector	Easy configuration via an available remote control	No configuration required	Configuration possible with or without an app
<b>Weather effects</b>	No impact	No impact	Weather conditions may affect operation	Weather conditions may affect operation	No impact
<b>Detection mode</b>	Between 1 and 6 metres	Depending on the size of the loop	Detection field max. 9,9 x 9,9 m	Detection distance $\pm 15$ m	Detection distance $\pm 7$ m
<b>Detection fields</b>	1 detection field adjustable	Self-defined via positioning and dimensions of the loops	2 independent detection fields adjustable	1 detection line	3 independent detection fields adjustable (virtual loops)
<b>Detection capabilities</b>	Vehicles, pedestrians and cyclists	Detection of vehicles, pedestrians, cyclists. motorcycles are not always detected. Unreliable detection at higher vehicles.	Vehicles, pedestrians and cyclists	Vehicles, pedestrians and cyclists	Distinction between vehicles and pedestrians/cyclists
<b>Free space</b>	Open space of 70 / 80 cm needed around the radar	Attention to presence of metal objects	Open space of 50 / 70 cm required around the laser sensor	No free space required	No free space required

## TAILOR-MADE IN BELGIUM

Alphatronics is a **manufacturer** of customised perimeter security solutions with the flexibility to adapt security needs to a specific situation.

In-house development and production, modularly designed to integrate with other business processes. It is in our DNA to **innovate** and in doing so, we always deliver the highest quality.

## SOFTWARE INTEGRATION

We feature a **very accessible RESTfull API**. This enables the integration of Alphatronics-supplied hardware devices and a third-party software solution.

## INSTALLATION AND SERVICE

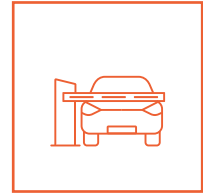
With more than **35 years of experience** in installation and service, we offer the expertise for perfect integration of your entire system.

A maintenance contract guarantees that the system will always be up and running.

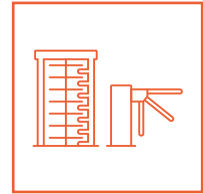
The helpdesk with professional and fast service is always ready for support.

## COUNT ON ALPHATRONICS FOR

- an extensive and innovative product range
- creative and sophisticated solutions
- technical and commercial support
- project strategy
- excellence in system integration



ACCESS FOR  
VEHICLES



ACCESS FOR  
PEDESTRIANS



OPERATING COLUMNS  
& PILLARS



API

