

# VEHICLE DETECTION



Functionality, reliability, efficiency, and design come together in our vehicle detection range. Our sensors offer high quality, above ground detection for a variety of applications and purposes, such as presence, activation, counting and safety.

Our vehicle detection sensors provide solid solutions for above ground vehicle detection that cater both everyday applications and heavy traffic or secured locations. Each sensor is equipped with a unique set of features to cater to different on-site requirements, and they are the perfect solution for sites where inground induction loops are impossible or not allowed. The performance during challenging weather conditions like heat, snow and rain is excellent and the sensors are therefore suitable for both indoor and outdoor use.

Installation doesn't require advanced tools or civil engineering. Also, the above surface mounted sensors are easily accessible and require only a small amount of maintenance and therefore they are even more efficient.



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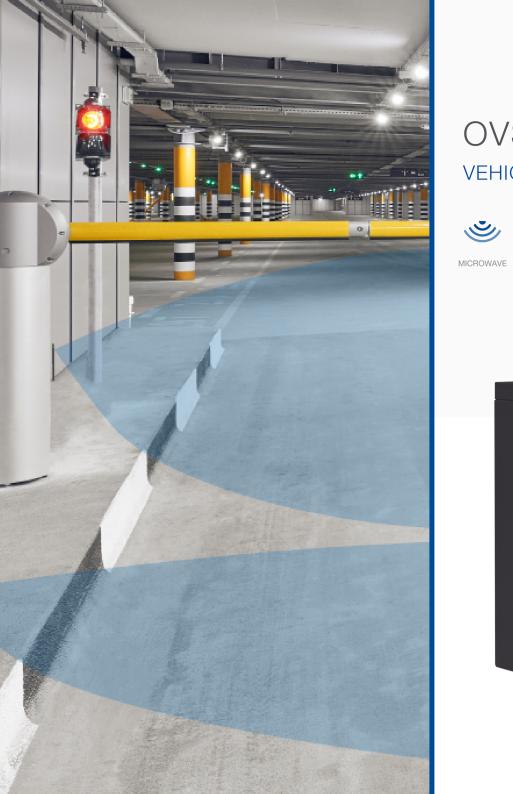
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# OVS-02GT

# VEHICLE DETECTION FOR GATE & BARRIER AUTOMATION





BLUETOOTH



INSTALLING GROUNDWORK SAVING









TRAFFIC FRIENDLY MOUNTING HEIGHT



The OVS-02GT is a versatile vehicle detection solution for gate and barrier automation. It offers a stable, reliable, weather resistant performance and is not affected by ground movement. This 'virtual loop' is installed above ground on a pole, wall or barrier housing and offers an easy set-up with an app.

#### **Excellent performance**

The OVS-02GT vehicle detection sensor for automatic gates and barriers offers excellent short and long range detection up to 8 meters and a wide-angle adjustment of 90° to 95°. The sensor is not affected by ground movement and is able to filter out pedestrian traffic to avoid unnecessary activations. It detects all type of vehicles and materials; stationary vehicles and moving vehicles up to 35km/h will be detected.

#### **Easy above-ground installation**

The above-ground installation on a barrier housing, wall or pole makes it a less invasive solution for many locations where a ground loop is not possible or even allowed. After mounting the setup is quick and easy with an app.

#### Stable all weather detection

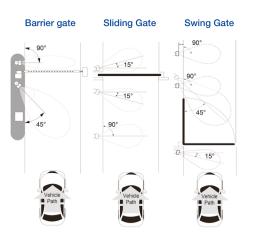
The microwave technology ensures exceptional performance in challenging weather conditions and warmer climates. With a built in heater and IP66 rating OVS-02GT ensures a reliable detection in cold, wet or humid weather conditions.

#### Do more with one sensor

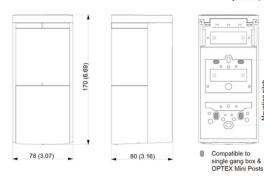
The presence detection prevents damage to the vehicle from early closing barriers. The sensor can also be used for activating third party devices like signalling lights and ticketing machines.

[Unit:mm(inch)]

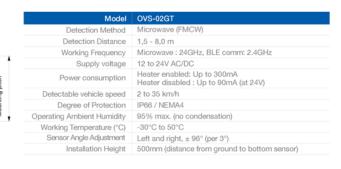
#### **Installation Conditions**



#### **Dimensions**



## **Short Specifications**



All product specifications are subject to change without notice of improvement.





# OVS-01GT

# VEHICLE DETECTION FOR GATE & BARRIER AUTOMATION















MICROWAVE ULTRASONIC GROUNDWORK



The OVS-01GT vehicle detection sensor for presence detection and activation. It is a dual technology solution designed for gate, barrier or industrial door automation. The sensor services in many applications, such as parkings, perimeter entrances and exits, loading docks, traffic management and more.

#### Reliable detection

Mounted above the ground, the OVS-02GT detects a vehicle arriving at a speed of 2 to 20km/h and then stopping. The detection is ensured using a combination of microwave and ultrasonic wave sensing technology. This technology as opposed to video-based vehicle detection systems is not affected by lighting conditions. In many cases, this sensor can replace a ground loop sensor or video based sensors.

# Gate, barrier, industrial door activation

The OVS-01GT has been designed to activate the operator of an automatic gate, barrier or industrial door using a relay output. The vehicle detector provides reliable detection even in harsh environments such as dust, rain, and snow; it has a built-in heater allowing an operation range up to -30 degree Celsius.

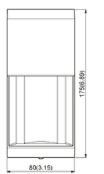
#### **Above ground installation**

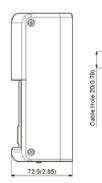
The OVS-01GT vehicle sensor detects small and large vehicles within a 5.5m range without the use of an in-ground device like a ground loop. There is no need for civil engineering work for mounting the sensor. This makes the installation non disruptive and an ideal replacement to induction loops in areas where ground work is impossbile or restricted. Calibrating the sensor is easy with quick distance and sensitivity adjustment settings.

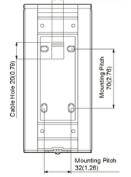
#### **Installation Conditions**

#### **Dimensions**

# Barrier gate Sliding Gate 90° Public side 90° Socure side Vehicle Path







## **Short Specifications**

Model	OVS-01GT
Detection Method	Microwave (Doppler shift, FMCW) and Ultrasonic
Detection Distance	Microwave Sensor: 0.8 to 5.5m, adjustable Ultrasonic Sensor: 0.1 to 1.5m adjustable
Working Frequency	Microwave : 24GHz, Ultrasonic : 56kHz
Supply voltage	12 to 24 VDC
Power consumption	Heater enabled: Up to 200mA Heater disabled: Up to 80mA (at 24V)
Detectable vehicle speed	2 to 20 km/h
Degree of Protection	IP65
Operating Ambient Humidity	95% max. (no condensation)
Working Temperature (°C)	-30°C to 50°C
Sensor Angle Adjustment	Left and right, ±30° (per 5°)
Installation Height	500mm (distance from ground to bottom sensor)

All product specifications are subject to change without notice of improvement.





# OVS-01CC

## VEHICLE DETECTION FOR CAR COUNTING APPLICATIONS











MICROWAVE GROUNDWORK

SAVING

TRAFFIC FRIENDLY

MOUNTING HEIGHT



The OVS-01GT vehicle detection sensor for presence detection and activation. It is a dual technology solution designed for gate, barrier or industrial door automation. The sensor services in many applications, such as parkings, perimeter entrances and exits, loading docks, traffic management and more.

#### **Excellent performance**

The OVS-01CC is designed to detect the presence of a vehicle in car counting applications. It reliably counts small and large vehicles within a range of 8m, travelling at a speed from 2 to 60km/h. The detection area can be customized with 8 range settings, 5 sensitivity settings and one-touch calibration.

#### **Easy installation**

This sensor is easily mounted above ground and directly wired to the gate or barrier operator. There is no need for civil engineering and traffic can proceed during installation. The sensor offers a non disruptive, speedy and an ideal replacement to induction loop. The simple to use menu has visual indicators and calibration can be done within 30 minutes.

#### **Weather proof detection**

The OVS-01CC has been designed to cope with harsh weather conditions. Its operating temperature ranges from -30 degrees to 50 degrees Celsius, its housing is IP65 rated. It detection performance will not be affected by changes in lighting or weather conditions.

#### **Ignores Human Movement**

In order to get a correct count, it is important not to detect pedestrians. With 5 selecable menu setting options the level of sensitivity can be adjusted so false detections can be avoided.

#### **Installation Conditions**

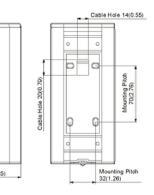
Install the pole for the sensor in the following layout.

direction and height are correct.

The sensor will not work properly unless its installation

#### **Dimensions**





## **Short Specifications**

Model	OVS-01CC
Detection Method	Microwave Doppler shift and FMCW technologies
Detection Distance	0.8 to 8m (2.6 to 26.3ft), adjustable
Working Frequency	Microwave: 24GHz
Supply voltage	12 to 24 VDC
Power consumption	Heater enabled: Up to 190mA Heater disabled: Up to 70mA (at 24V)
Detectable vehicle speed	2 to 60 km/h
Degree of Protection	IP65
Operating Ambient Humidity	95% max. (no condensation)
Working Temperature (°C)	-30°C to 50°C
Sensor Angle Adjustment	Left and right, ±30° (per 5°)
Installation Height	500mm (distance from ground to bottom sensor)

All product specifications are subject to change without notice of improvement.



# **DECADES OF TRUSTED SOLUTIONS**

**OPTEX** was founded in 1979 in Japan and short after, it pioneered with the **world's first automatic door sensor** based on passive infrared. This was the official take off and we've been **innovating** ever since.

At OPTEX quality is valued over quantity and via extensive technical research, testing and listening to our highly valued voice of customers we develop, design and manufacture sensing technologies, products and applications which are trusted and renowned, reliable, durable, improving user comfort and safety, easy to install, and which require a low maintenance level.

Nowadays OPTEX has extended and immersed its sensing expertise within various business areas including automatic doors, security applications, **vehicle detection** and industrial sensing, which are launched, distributed and serviced in the global market.

The **Entrance solutions** in the European, Middle East and African market are handled from the OPTEX Technologies HQ in The Hague, The Netherlands and its local branch offices.









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