

VIRTUAL LOOP

Vehicle Detection Sensor

No need for a ground loop!
No in ground device required!

High performance sensing with a microwave technology.

Presence detection for vehicle is provided by microwave FMCW technology.

**No in ground
device required**

Since no in ground device required
like induction loop. Construction
period can be shorted.

Outdoor

Automatic sensing adjustment
enables to be used at outdoor.

**High accurate
sensing**

Improved vehicle sensing
High accuracy and well filtered for
vehicle

**Human
cancellation**

Human cancellation ignores
humans and detects vehicles
only.



Vehicle Detection Sensor for gate

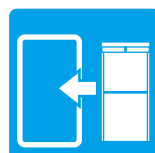
VIRTUAL LOOP OVS-02GT(BL)



Various settings can be made on a smartphone



Direct conduct
access



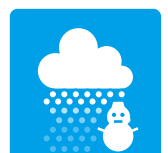
Direct installation
for single gang box



Flexible
power supply



Wide angle
adjustment



Improved
built-in heater



Visible indicator



Color variation



Water & Dust
protection



2 output / 1 input



Max Range

Specifications

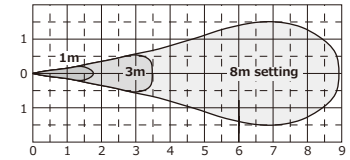
Name		Vehicle Detection Sensor (Surface mount)	
Model		OVS-02GT(BL)	
Detection method		Microwave (FMCW)	
Frequency		Microwave : 24GHz, BLE communication : 2.4GHz	
Response		MIN 500ms	
Supply voltage		12 to 24V AC/DC	
Power consumption		Heater enabled : Up to 300mA, Heater disabled : Up to 90mA(at 24V)	
Output	Spec	1	Non-voltage solid state relay output 30VDC 0.3A or less (resistance load) (N.O. / N.C.)
		2	Non-voltage mechanical relay output 30VDC 1A or less (resistance load) (N.O. / N.C.)
	Delay [s]		OFF / 0.5 / 1 / 2 / 3 / 4
	Hold timer [s]		OFF / 0.5 / 1 / 2 / 3 / 10 / 30 / 60
	Mode		Detection / Pre-detection / Mask
	Type		Holding / Pulse IN / Pulse OUT
Pulse time duration		150ms / 250ms / 500ms / 1s	
Input	Spec	N.O. contact Non-voltage relay Input On resistance 100Ω or less, Off resistance 200kΩ or more, Internal pull-up voltage: approx. 3.3V	
	Mode	Link(OR gate) / Link (AND gate) / Inhibit / Wake	
Application		Barrier-Activation, Protection / Slide gater-Activation, Protection / Swing gater-Activation, Protection, Shadow	
Detectable vehicle speed		2 to 35km/h (1.2 to 22 mi/h)	
Device setting	Detection range	1.5m (7ft.) to 8.0m (26ft.) *0.5m(20in.) pitch	
	Main sensitivity	Level 1 to 7	
	Fine tuning presence	Level 1 to 7	
	Close range sensitivity	Level 1 to 7	
	Side approach detection	Off / On(2.5s)	
	Vibration sensitivity	Off / Low / Middle / High	
	Sensitivity boost	Off / Low / Middle / High	
	Sensitivity boost timer [s]	Off / 0.5 / 1 / 2 / 3 / 4 / 5 / 10 / 20 / 40	
	Relay Response time	Level 1 to 4	
	Presence detection timer [min]	5 / 15 / 60 / 180 / Infinity	
Slide gate cancellation		Off / On	
Indicator	On / Off		Switchable (with the smartphone App or by holding a magnet close to the unit)
	Standard operation mode	Detection operation	Standby : Solid green, Detected : Solid red, Bad environment : Solid purple, Calibration uncompleted : Solid blue
		Wake up	Wake up : Solid blue for 3 seconds
		Sensor reset	Completed reset : Blinking blue (Fast) for 2 seconds
	Smartphone app connection mode	Setting	Stanby : Blinking green(slow), Detected : Blinking yellow(slow), Bad environment : Blinking purple(slow), Calibration uncompleted : Blinking blue(slow)
		Area check	Stanby : Blinking green(slow), Pre-detected : Blinking yellow(slow), Detected : Blinking red(slow)
		Calibration	In process : Blinking Blue & Green, Error Unstable : Blinking Red & Yellow(Fast), Error High reflection : Blinking Red & Blue(Fast), High reflection : Blinking Purple(for 10s)
Ambient Temperature		-30 to 50°C (-22 to 122°F)	
Operating Ambient Humidity		95% max. (no condensation)	
Degree of Protection		IP66 / NEMA4	
Installation Location		Indoor / Outdoor	
Installation Height		500mm(20in.) (from the ground to the bottom of the unit)	
Sensor Angle Adjustment		Left and right : ±96°(3° pitch)	
Weight		600g (21oz) (including accessories)	
Accessories		Retaina screw (Metric coarse thread M4x12 : 2pcs, Tapping Screws 4x20 : 2pcs), Quick manual	

Specifications are subject to change without notice for improvement.

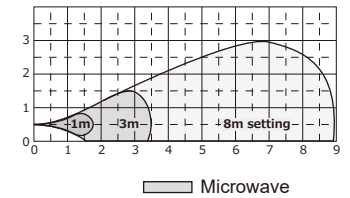
Detection Area Diagram

[Unit:m] 1m=3.3ft.

Top View



Side View

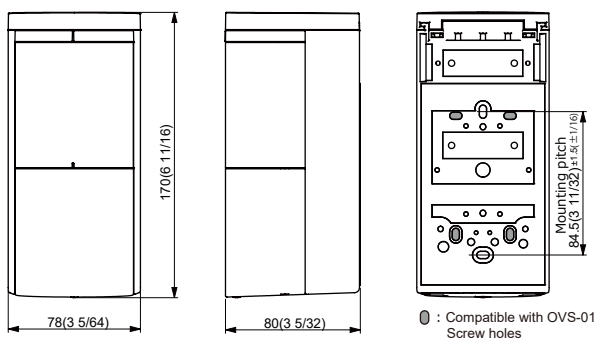


Installation height 0.5m(1.6ft.),
Operation type: Device activation,
Sensitivity: 4,

*Under normal operation, the detection area by an actual vehicle may be smaller.

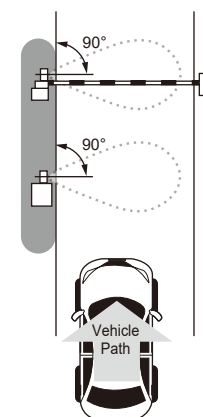
Dimensions

[Unit:mm(inch)]

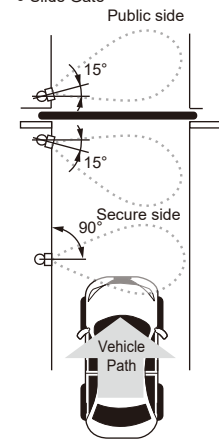


Sensor Installation Conditions

• Barrier Gate



• Slide Gate



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