

# Vehicle Detection Sensor **VIRTUAL LOOP**

**No in ground device required!  
Possible to be used at outdoor!**

High performance sensing with a combination of microwave Doppler shift and FMCW technology.

**No in ground  
or on ground  
device required**

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

**Outdoor**

Automatic sensing adjustment enables to be used at outdoor.

**No color  
influence**

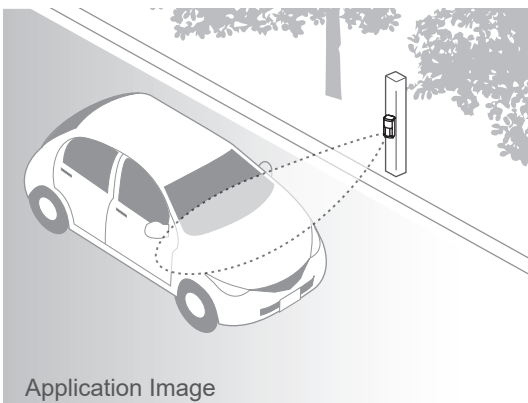
Technically no influence for vehicle body color.

**Human  
cancellation**

Human cancellation enables to ignore human and detect vehicle only. (patent pending)



Vehicle Detection Sensor for car counting  
**VIRTUAL LOOP OVS-01CC**



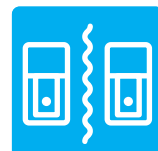
Dust and water proof



2 outputs



Built-in heater



No interference



Area check



Horizontal angle  
adjustment

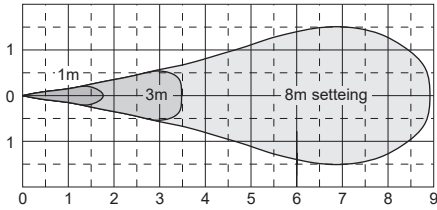
# Specifications

Name	VIRTUAL LOOP (Vehicle Detection Sensor for Vehicle Counting)	
Model	OVS-01CC	
Detection Method	Combination of microwave Doppler shift and FMCW technologies	
Sensor Frequency	24GHz	
Response	300msec	
Supply Voltage	12 - 24VDC	
Power Consumption	Heater enabled: Up to 190mA, Heater disabled : Up to 70mA (at 24V)	
Output	Relay output DC30V, 0.3A (N.O. / N.C. switchable)	
Microwave Sensor Sensing Distance	0.8 to 8m (2.6 to 26.3ft), adjustable	
Detectable Vehicle Speed	2 - 60 kph (1.2 - 37.3 mph)	
Device Setting	Sensitivity	Level 1 to 5
	Output 1 Contact Switching	N.O. / N.C.
	Output 2 Contact Switching	N.O. / N.C.
	Sensing Distance	1 / 2 / 3 / 4 / 5 / 4 / 6 / 7 / 8 m (3.3 / 6.6 / 9.8 / 13.1 / 16.4 / 19.7 / 23.0 / 26.3 ft.)
Indicator	Normal Operation	Standby: Solid Green, Detected: Solid Red Unsuitable environmental notification: Slow Blinking Green
	Detection Area Check	Non detection: Blinking Green, Detected: Blinking Red
	Calibration	Getting ready: Slow Blinking Blue, Calibrating: Quick Blinking Blue
	Sensor Reset	Reset Complete: Solid Yellow for 2 seconds
Human Cancellation Function	Yes	
Operating Ambient Temperature	-30 to 50°C (-22 to 122 F)	
Operating Ambient Humidity	95% max. (no condensation)	
Degree of Protection	IP65	
Installation Location	Indoor / Outdoor	
Installation Height	500mm (20in.) (distance from the ground to the bottom of the unit)	
Sensor Angle Adjustment	Left and Right: ±30 degrees (5-degree step)	
Weight	400 g (15oz)	
Accessories	Retaining screws x 4, Installation manual, OVS-SGA(A) included for US model only	

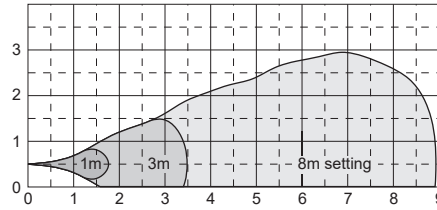
## Detection Area Diagram

[Unit:m] 1m=3.3ft.

Top View



Side View

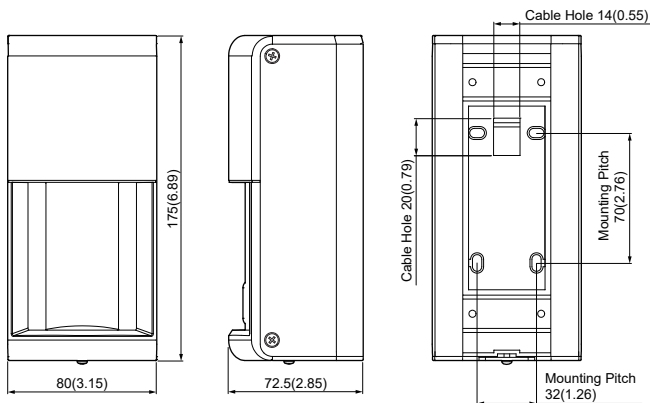


Installation height 0.5m, Sensitivity: 3, Detection area check mode

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

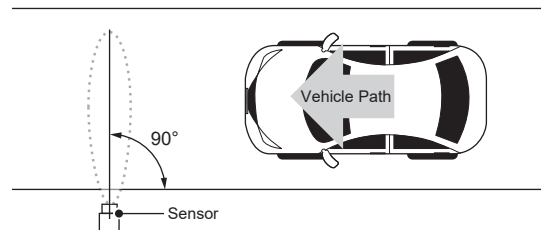
## Dimensions

[Unit:mm(inch)]



## Sensor Installation Conditions

Install the pole for the sensor in the following layout. The sensor will not work properly unless its installation direction and height are correct.



Specifications are subject to change without notice for improvement.



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