

# Virtual Loop 2.0

Model number : OVS-02GT

**The Virtual Loop 2.0 is a Vehicle Presence Sensor for use on Gates and Barriers.**

The advanced Distance Measuring Radar reliably detects vehicles of all sizes while ignoring nearly all human movement. Eliminate all the hassles of installing and servicing in-ground loops and give your customer reliable activation and presence for all their gate applications.



## 26 Feet Extended Range



No cutting, coring or drilling of concrete or asphalt required



Extremely stable under all types of weather conditions



Presence Detection for all types of vehicles

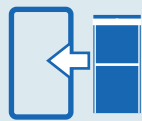


Can be programmed to ignore or detect humans based on application

Settings via Smartphone App



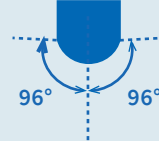
Direct conduit access



Direct installation for single gang box



12 - 24V AC / DC  
Flexible power supply



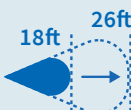
Wide angle adjustment



Improved built-in heater



Visible indicator



Longer detection range



IP66 & NEMA4  
Water resistance



2 outputs



Improved human cancellation

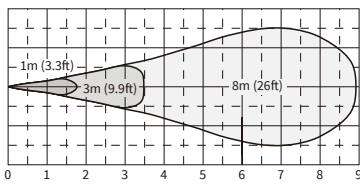
# Specifications

| Name                            |                                | Vehicle Detection Sensor (Surface mount)  |   |
|---------------------------------|--------------------------------|---|---|
| Model                           |                                | OVS-02GT  |   |
| Detection method                |                                | Microwave (FCW)   |   |
| Frequency                       |                                | Microwave: 24GHz, BLE communication: 2.4GHz   |   |
| Response                        |                                | MIN 500ms   |   |
| Supply voltage                  |                                | 12 to 24 VAC/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 gate - Activation, Protection / Swing gate - Activation, Protection, Shadow  |   |
| Detectable vehicle speed        |                                | 1.2 to 22 miles/h (2 to 35km/h)   |   |
| Device setting                  | Detection range                | 7ft (1.5m) to 26ft (8m) *20 inch (0.5m) 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  |   |
| Standard operation mode         |                                | Detection operation   | Standby: Solid green, Detected: Solid red, Bad environment: Solid purple, Calibration incomplete: Solid blue  |
|                                 |                                | Wake up   | Wake up: Solid blue for 3 seconds   |
|                                 |                                | Sensor reset  | Completed reset: Blinking blue (fast) for 2 seconds   |
| Smart phone APP connection mode |                                | Setting detection operation   | Standby: Blinking green (slow), Detected: Blinking yellow (slow), Bad environment: Blinking purple (slow), Calibration incomplete: Blinking blue (slow) |
|                                 | Area check                     | Standby: Blinking green (slow), Pre-detected: Blinking yellow (slow), Detected: Blinking red (slow)   |   |
|                                 | Calibration                    | In progress: Blinking blue & green, Error unstable: Blinking red & yellow (fast), Error high reflection: Blinking red & blue (fast), High reflection: Blinking purple (for 10s) |   |
| Ambient temperature             |                                | -22 to 122°F (-30 to 50°C)  |   |
| Operating ambient humidity      |                                | 95% max (no condensation)   |   |
| Degree of protection            |                                | IP66 / NEMA4  |   |
| Installation location           |                                | Indoor / Outdoor  |   |
| Installation height             |                                | 20in (500mm) from the road surface to the bottom of the unit  |   |
| Sensor angle adjustment         |                                | Left and right: ±96° (3° pitch)   |   |
| Weight                          |                                | 21oz (600g) including accessories   |   |
| Accessories                     |                                | 4pcs attached screws (2pcs Metric coarse thread M4 x 12, 2pcs Tapping screw 4 x 20), Quick reference guide  |   |

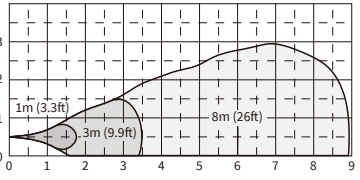
Specifications are subject to change without notice for improvement.

# Detection Area Diagram

Top View [Unit:m] 1m=3.3ft.



Side View

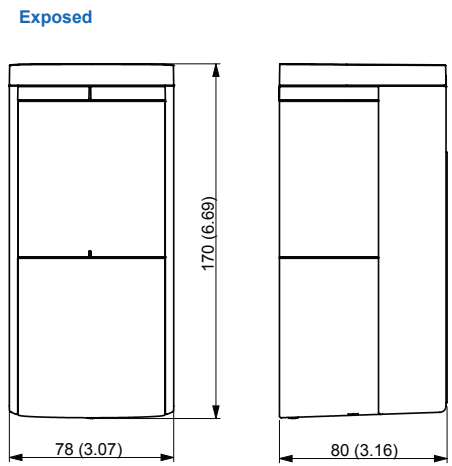


— Microwave

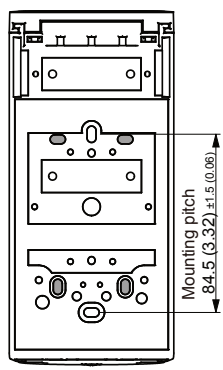
Installation height 0.5m(1.6ft.),  
Operation type: Device activation,  
Sensitivity: 4,

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

# Dimensions



[Unit:mm(inch)]



Compatible to single gang box & OPTEX Mini Posts

# Sensor Installation Conditions

