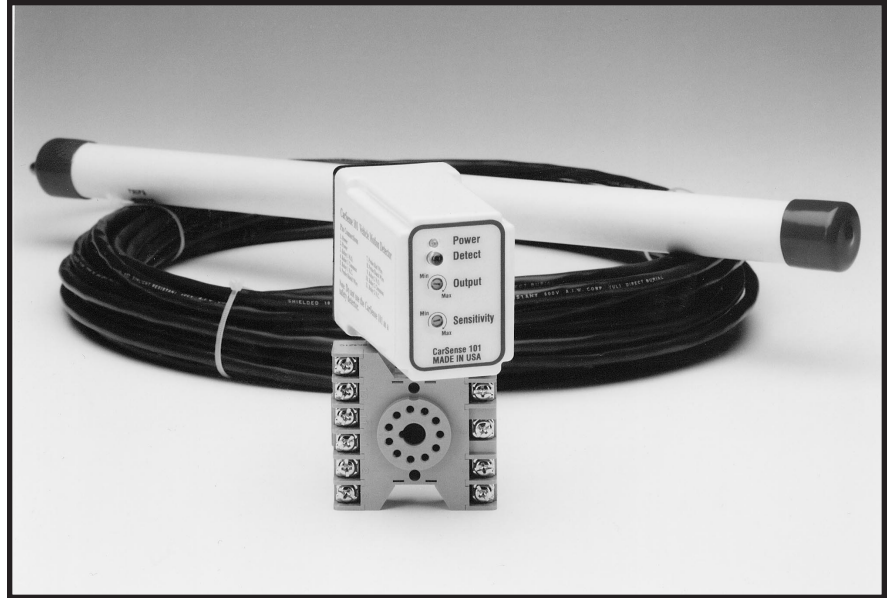


# OUTDOOR BURIED VEHICLE MOTION DETECTOR WITH SENSING PROBE

## CARSENSE 101 - DRIVEWAY SENSOR

- Sensing probe is buried in the ground so it is not noticed by a potential intruder or vandals.
- Is housed in a small relay type housing so it is easy to integrate with security control boards, gate and door operators.
- Has all the controls and indicators mounted on the front panel of the unit providing for easy access and operation.
- Has wide power supply options and it can be ordered in 12V AC/DC, 24V AC or DC, 120V AC, 240V AC. Low current consumption makes it excellent choice for solar power applications.



## APPLICATIONS

- **Safety** - detects moving vehicles in an industrial environment where there are blind areas along the driving path and actuates warning lights.
- **Energy Conservation** - detects moving vehicles along a driving path in a warehouse and turns lights on only in the proximity of the vehicle.
- **Security** - detects approaching vehicles or an unauthorized movement of a parked vehicle and actuates alarms, video cameras or vehicle annunciator.
- **Access Control** - "free exit" vehicle detector for gates, overhead doors and parking barriers.

*Note: Do not use the CarSense sensor for presence detection application. If presence detection is required use our LD-2000 loop detectors or IRB-4X infrared sensors.*

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**EMX**  
INDUSTRIES, INC.

# CARSENSE 101 - DRIVEWAY SENSOR

## Technical Information

Power Supply	12V AC/DC, 24V AC or DC, 120V AC, 220V AC
Power Supply Tolerance	+/- 20% from the power rating
Stand-by Current	10 mA maximum
Detect Current	45 mA maximum
Relay Type	DPDT
Relay Rating	1A 24V DC 120V AC
Sensitivity	High, Medium, Low adjustment
Off Delay	1 to 5 seconds adjustment
Control Unit Temperature Range	-40F to 170F
Probe Temperature Range	-40F to 170F
Power On Indicator	High intensity Green LED
Detect Indicator	High intensity Red LED
Sensitivity Control	Continuous adjustment
Off Delay Control	Continuous adjustment
Surge Protection	MOV, neon and silicon protection devices
Control Unit Housing	Break resistant Polycarbonate H:2.2"(55mm), W:1.6"(41mm), D:3.25"(84mm)
Connector	86CP11 11 pin connector
Probe	PVC water tight housing (Length 17", Diameter 1") with shielded direct burial lead-in cable

## Ordering Information

CS 101-12-50	power supply of 12V DC and 12V AC
CS 101-24DC-50	power supply of 12V DC
CS 101-24AC-50	power supply of 12V AC
CS 101-120-50	power supply of 120V AC
CS 101-220-50	power supply of 220V AC
CS Probe-50	probe with 50 feet lead-in wire

## Probe Selection

Each probe comes with 50 feet long lead-in wire. To specify other lengths in multiples of 50 feet, modify the last digits of the part number as necessary. For example: CS 101-12-150 or CS Probe - 150 for probe with 150 feet lead-in wire.

## Installation Notes

The CarSense CS 101 sensor uses passive probe sensor to detect changes in the earth's magnetic field. These changes are caused by a movement of ferrous metal objects such as a car in the proximity of the probe. The sensing area of each probe is in the shape of about 15 foot circle. The size of this detection circle changes with the size and speed of the moving car.

The passive probe sensor can be buried in the ground about 6 inches deep parallel to the paved driveway. It also can be placed 2" deep in asphalt or concrete under the path of the vehicle. In all cases the probe has to stay totally motionless and be free of any vibration in order to prevent false detects. The lead-in cable has to be protected from any damage to its outer insulation. Refer to the installation manual supplied with the unit for full installation instructions.