

# WIRELESS DETECTORS

## Detecting Vehicles Using Infra-Red, Microwaves and Laser.

These products have been designed to be highly versatile for a host of global traffic applications. The Wireless Vehicle Detector (WVD) is built with a microwave motion sensor and an active infra-red presence sensor in the same housing. The most suitable technology for VA traffic control systems.

The Wireless Laser Detector emits invisible IR and visible laser beams which is used for positioning and determining the sensing coverage area (the visible laser beams are inactive during normal functioning). It can filter out environmental interferences and built for outdoor applications (degree of protection: IP65). Suitable for larger coverage of detection area.

### Functional Features

- ✔ Activation when vehicle present and moves in detection field
- ✔ Adjustable coverage zone of detection via remote control
- ✔ Capable of detecting vehicles and filtering irrelevant objects (pedestrian and cross-traffic)
- ✔ Adjustable maximum presence detection time
- ✔ High immunity to rain and snow
- ✔ Reliable, efficient and direction-sensing motion detection
- ✔ Alternative to inductive loop detector



**QUALITY POLICY**

It is our commitment to provide the service with the highest standard of safety, quality and reliability that meet the specified requirements and expectations.

**Technical Specifications**

**WIRELESS LASER DETECTOR (WLD)**

<b>Technology</b>	Laser Scanner, time-of-flight measurement
<b>Detection mode</b>	Presence (EN 12453 Type E)
<b>Max. detection range</b>	9.9 m x 9.9 m
<b>Angular resolution</b>	0.3516
<b>Typ. min. object size</b>	2,1 cm @ 3 m/ 3.5 cm @5 m/ 7cm @ 10 m (in proportion to object distance)
<b>Testbody</b>	700 mm x 300 mm x 200 mm (testbody according to EN 12445)
<b>Emission characteristics</b>	
<b>IR laser</b>	Wavelength 905 nm; max. Output pulse power 75 W; Class 1
<b>Visible laser</b>	Wavelength 650 nm; Output power 0.95 mW; Class 2
<b>Supply Voltage</b>	10-35 V DC @ sensor terminal
<b>Power consumption</b>	<5 W
<b>Response time</b>	typ. 20 ms; max. 80 ms
<b>Output</b>	2 electronic relays (galvanic isolation-polarity free)
<b>Max. switching Voltage</b>	35 V DC / 24 V AC
<b>Max. switching current</b>	80 mA (resistive)
<b>LED-signals</b>	1 blue LED: power-on status 1 orange LED: error status Bi-colour Led: detection/ output
<b>Dimensions</b>	125 mm (L) x 93 mm (D) x 70 mm (H) (mounting bracket + 14 mm)
<b>Material</b>	PC/ASA
<b>Colour</b>	Black
<b>Rotation angles (bracket)</b>	-5° to +5° (lockable)
<b>Tilt angles (bracket)</b>	-3° to +3°
<b>Protection degree</b>	IP65
<b>Temperature range</b>	-30 °C to 60 °C if powered
<b>Humidity</b>	0 - 95 % non condensing


**WIRELESS VEHICLE DETECTOR (WVD)**



<b>Technology</b>	Microwave doppler radar	Active infrared
<b>Detection mode</b>	Motion	Presence
<b>Reaction time</b>	100 ms	250 ms
<b>LED signals</b>	Green	Red
<b>Detection field</b>	4 m x 5 m	250 ms
<b>Min. detection speed</b>	5 cm/s	5 cm/s to activate detection
<b>Transmitter frequency/ Wavelength</b>	24.150 GHz	875 nm
<b>Transmitter power density</b>	< 5 mW/cm <sup>2</sup>	< 250 mW/cm <sup>2</sup>
<b>Supply voltage</b>	12 V to 24 V DC	
<b>Temperature range</b>	From -30 °C to +60 °C	
<b>Main Frequency</b>	50 to 60Hz	
<b>Power consumption</b>	< 3.5 W/ VA	
<b>Output</b>	2 relays (free of potential change-over contact)	
<b>Max. contact voltage</b>	42 V AC/ DC	
<b>Max. contact current</b>	1 A (resistive)	
<b>Max. switch power</b>	30 W (DC)/48 VA (AC)	
<b>Dimensions</b>	124 mm (L) x 102 mm (H) x 96 mm (W)	
<b>Weight</b>	400 g	
<b>Material</b>	ABS/ Polycarbonate	



**DISCLAIMER**

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