SVR-500 Stopped Vehicle Detection Radar

The SVR-500 generates an alarm in under 20s of a vehicle stopping within its 500m range on either carriageway 24/7 in any weather.

SVR 500

The SVR-500 scans the 360 degrees azimuth. It uses FMCW with dual ramps enabling it to measure a target's range and speed on each scan. The detection zones are configured for the different carriageways, slip roads, emergency areas and hard shoulders as applicable for each radar installation, as well as defining areas of no interest. In addition to providing location data for the stopped vehicle the SVR-500 can take control of an optional camera slewing it onto target saving further time for operator response.

FEATURES

- Up to 500m road coverage
- Rapid detection
- Low false alarm rate
- All weather capability
- Scans all carriageways
- High detection probability
- Minimal blind spot
- Automatic control of PTZ camera
- Quick to install
- Easy to commission

APPLICATIONS

- Smart Motorways
- Bridges
- Tunnels
- Roadworks
- All Lane Running Highways

The radar operates autonomously using inbuilt detection and processing without reference to any other radars or equipment, thereby minimising the communications requirements to a Regional Control and Operations Centre and avoiding single point failures in our equipment.

Microwave sensors work 24 hours a day in all weathers seeing through rain, fog, mist and snow, in blindingly bright light or total darkness. For optimum performance an un-obstructed line-of-sight between the sensor(s) and target is required.

OgierElectronics

SVR 500

SPECIFICATION

Operating Frequency Band	24.05 - 24.25 GHz (license exempt ISM band)
Technology	FMCW Radar
Transmitted Power	+20dBm (100mW) EIRP
Polarisation	Linear
Scan Rate	360°/s (1Hz)
Range	250m in all directions (500m total)
Azimuth Beam Width	2.2° (combined transmit and receive)
Elevation Coverage	Fan beam +2° to -30° nominal
Target Types	All Vehicles
Target Angular Resolution	1.3°
Target Range Resolution	1m
Detection Zones	Multiple free-form, user defined
Maximum Blind Zone	15m radius at maximum mounting height
Network	Ethernet, 100Mbps, RJ45 port
Power Supply	POE (802.3af or at) standard or 24Vd.c option
Power Drain	11W nominal (up to 100W if heaters fitted)
Time Keeping	Internal real-time clock (48hrs retention during power outage)
Dimensions	Diameter 332mm, Height 310mm nominal (excluding studs)
Weight	3.3kg
Fixings	4 off M6 studs on standard 101.6mm (4 inch) PCD
Installation Height	5m - 10m
Operating Temperature	-20°C to +55°C (-40°C with optional heater)
RF Hazard	None (<0.5mW/cm^2 average power at antenna)
Routine Maintenance	None required
Approvals	EN300440, EN301489 EMC, IEC60950 Safety

Ogier Electronics reserve the right to alter specifications without notification

TRIAL RESULTS

Detection Probability	>85%
False Alarm Rate	<15%
Delay Timings	Alert 20s max. Clear 60s max.

Detection probability and false alarm rates stated are as observed in trials. They are indicative and not guaranteed. The trial required alarms to be raised within 20s of a vehicle stopping. Extending this time will improve both detection and false alarm rates. For further information on the trials please contact us at: enquiries@ogierelectronics.com

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