

DRVEGRD® MSE Line

Mobile Speed Enforcement Radar Family

76-81 GHz

Designed for worldwide deployment, the sensors support compliance with regional regulations.

Frequency

The DRVEGRD MSE radar family is purpose-built for modern **mobile speed enforcement**, delivering high-resolution speed and position measurement with **enforcement-grade precision**. Engineered for dependable operation across a wide range of deployment scenarios, these sensors enable authorities and system integrators to maintain **accurate speed monitoring** wherever mobility is required.



DRVEGRD 169 MSE

Delivers enforcement-grade radar performance for mobile speed enforcement in patrol vehicles, trailers, and semi-stationary systems.

Its compact design, wide field of view, and reliable multi-object tracking enable accurate speed measurement in real-world traffic scenarios, supporting flexible deployment with minimal integration effort.



DRVEGRD 171 MSE

Provides advanced radar sensing for demanding mobile speed enforcement applications requiring extended range and high object separation.

With enhanced angular resolution and robust multi-object tracking, the sensor supports precise speed detection in complex traffic environments while enabling scalable integration into high-performance enforcement systems.

Where to use ?



Mobile Speed Enforcement
Patrol-vehicle integration



Mobile Roadside Trailer
Semi-Stationary Deployment

Why choose the DRVEGRD® MSE Line?

Enforcement-Grade Accuracy ✓

Delivers precise speed and position measurements for trusted mobile enforcement results.

Reliable Operation in All Conditions ✓

Ensures consistent performance in dense traffic, challenging weather, and varying light conditions.

Multi-Lane Target Tracking ✓

Detects and separates multiple vehicles simultaneously across several lanes.

Flexible Installation & Low Power Consumption ✓

Fits seamlessly into mobile platforms while enabling efficient, battery- or solar-powered operation.

Key Features



High-Precision Doppler Speed Measurement

Provides accurate speed detection with reliable Doppler-based measurement for enforcement-grade results.



Wide Detection Range for Mobile Applications

Covers short to long distances, enabling effective monitoring in diverse mobile enforcement scenarios.



Automatic Multi-Target Tracking

Simultaneously identifies and tracks multiple vehicles for clear, dependable measurement in dense traffic.



Compact and Robust for Mobile Deployment

Designed with a durable, space-saving form factor ideal for trailers, patrol vehicles, and portable systems.



Low Power Consumption for Trailer & Solar Use

Operates efficiently with minimal power requirements, supporting battery and solar-powered enforcement setups.



Consistent Performance in Rain, Fog & Low Visibility

Maintains reliable detection accuracy regardless of challenging weather or environmental conditions.

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		DRVEGRD® 169 MSE	DRVEGRD® 171 MSE
PERFORMANCE		Long-Range Mode	Extra-Long-Range-Mode
Operating Frequency		77...81GHz 3 center frequencies (bands)	76...77GHz 4 center frequencies (bands)
Range	Minimum	1.3m/130m 4.27ft/426.5ft	1.2m/240m 3.94ft/787.4ft
	Separation	≤ 1.3m ≤ 4.27ft	≤ 2.4m ≤ 7.87ft
	Sensitivity on Passenger Car	95m 311.68ft	180m 590.55ft
	Accuracy	< 0.67m < 2.2ft	≤ 0.6m ≤ 1.97ft
Speed	Min./Max.	-240...+240km/h -149...+149mph	-300...+300km/h -186...+186mph
	Separation	0.15m/s	≤ 0.26m/s
	Accuracy	< 0.075m/s	≤ 0.07m/s
Angle	Field of View: Azimuth	-65...+65°	-50...+50°
	Field of View: Elevation	-7.5...+7.5°	-10...+10°
	Separation: Azimuth	-	2°
	Accuracy: Azimuth	≤ 0.5°	≤ 0.25°
	Accuracy: Elevation	≤ 0.5°	
Mechanical Details			
Weight		< 193g < 6.80oz	< 455g < 16.05oz
Dimensions (H/W/D)		69.1 x 79 x 18.5mm 2.72 x 3.11 x 0.72in	97 x 143 x 25.7mm 3.82 x 5.63 x 1.01in
Further Information			
Initialization Time		< 4s	
Update Cycle Time		≤ 70ms	≤ 55ms (<40ms for Short-Range Mode)
Point Cloud Rate		up to 256 per cycle (~4.500 points per second)	up to 255 per cycle (~4.500 points per second)
Processing Latency		2-4 cycles	
Operating Voltage		7...32V	
Power Consumption		<4W	< 7W
Bandwidth		< 4000MHz	< 1000MHz
Max. Transmit Power (EIRP)		≤ 31dBm	< 35dBm
Operating & Storage Temperature		40...+85°C -40...+185°F	
Interfaces		1xCAN 500Mbit/s Ethernet 100MBit (2-wire) [default]	1xCAN 500Kbits/s 1xCAN FD 2MBit/s [point cloud] Ethernet 100BASE-T1 100MBit/s (2-wire) [default] Ethernet 1000BASE-T1 1GBit/s (2-wire) [radar cube streaming]
Connector		Cable Stump	MX64 Molex Series
Shock / Vibration		20g _{rms} / 14g _{rms}	tba g _{rms} / tba g _{rms}
Relative Humidity		0...95% (non-condensing)	
IP		67	
Pressure or Transport Altitude		0...10000m 0...32800ft	