



Automotive Sensor

DRVEGRD 152 & 171 | 77 GHz Front/Rear Radar

4D/PxHD resolution

Designed for autonomous driving applications

Full CMOS cascaded RF chips, high angular resolution/48TRX



Blind & misalignment diagnosis, interference suppression

Time and acquisition synchronisation

Plug-and-play 360° sensor data fusion

	DRVEGRD 152		DRVEGRD 171		
PERFORMANCE	Long-Range Mode	Medium-Range Mode	Long-Range Mode	Medium-Range Mode	Short-Range Mode
Operating Frequency	76...77 GHz 4 center frequencies	76...77 GHz 2 center frequencies	76...77 GHz 4 center frequencies	76...77 GHz 2 center frequencies	76...77 GHz 1 center frequency
Detection Range Passenger Car	180 m / 590.6 ft	66 m / 216.5 ft	240 m / 787.4 ft	100 m / 328.1 ft	40 m / 131.2 ft
Detection Range Min...Max	0.9...180 m / 2.95...590.6 ft	0.33...66 m / 1.08...216.5 ft	1.2...240 m / 3.94...787.4 ft	0.5...100 m / 1.64...328.1 ft	0.2...40 m / 0.66...131.2 ft
Range Separation	≤ 1.8 m / ≤ 5.9 ft	≤ 0.66 m / ≤ 2.17 ft	≤ 2.4 m / ≤ 7.87 ft	≤ 1.0 m / ≤ 3.28 ft	≤ 0.4 m / ≤ 1.31 ft
Range Accuracy	≤ 0.45 m / ≤ 1.48 ft	≤ 0.16 m / ≤ 0.53 ft	≤ 0.6 m / ≤ 1.97 ft	≤ 0.25 m / ≤ 0.82 ft	≤ 0.1 m / 0.33 ft
Speed Min...Max	-400...+200 km/h / -249...+124 mph		-400...+200 km/h / -249...+124 mph		-250...+200 km/h / -155...+124 mph
Speed Separation	≤ 0.26 m/s	≤ 0.26 m/s	≤ 0.26 m/s		≤ 0.52 m/s
Speed Accuracy	≤ 0.07 m/s	≤ 0.07 m/s	≤ 0.07 m/s		≤ 0.14 m/s
Field of View Azimuth	-50...+50°		-50...+50°		
Field of View Elevation	-10...+10°		-10...+10°		
Angle Accuracy Azimuth	≤ 0.5°		≤ 0.5°		
Angle Accuracy Elevation	≤ 0.5°		≤ 0.5°		
MECHANICAL					
Weight	< 200 g / ≤ 7.06 oz		< 300 g / < 10.58 oz		
Dimensions	97.5 x 143 x 19.5 mm / 3.84 x 5.63 x 0.77 in		97.5 x 143 x 26 mm / 3.84 x 5.63 x 1.02 in		
GENERAL					
Update Cycle Time	≤ 50ms		≤ 50ms	≤ 50ms	≤ 32ms
Operating Voltage / Power Supply	7 ... 32 V / < 7 W		7 ... 32 V / < 7 W		
Operating Temperature	-40...+85°C / -40...+185°F		-40...+85°C / -40...+185°F		
Interfaces	100 or 1000BASE-T1 Ethernet 1Gbit (2-wire); 2xCAN FD 5Mbit/s		100 or 1000BASE-T1 Ethernet 1Gbit (2-wire); 2xCAN FD 5Mbit/s		
Connector	MX4 Moles Series		MX4 Moles Series		
IP	IP 67		IP 67		

