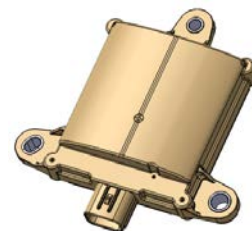


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General Description / Allgemeine Beschreibung:

SRR3-A is a complete radar system which is based on 24 GHz technology and contains a planar antenna. The processing is done by means of digital beam forming. The sensor has a field of view of $\pm 75^\circ$ in azimuth and a maximum range of about 90 m. The sensor works with pulse-compression modulation scheme and occupies a bandwidth of 200 MHz in ISM band. SRR3-A is designed for applications in passenger cars and trucks like Blind Spot Detection, Lane Change Assist, Rear Crossing Traffic Alert, Rear Pre-crash, Safe Exit, Collision Mitigation, Distance Warning/Monitoring, etc.



Technical Data / Technische Daten:

Signal / Signal	Value / Wert	Unit / Einheit	Remark / Bemerkung
Radar Characteristics			
Operation frequency	24.05 ... 24.25	GHz	
Distance measurement	1 ... 90	m	Max. distance for point targets without tracking
Accuracy for distance measurement	± 0.2	m	For a single target
Speed measurement	-155 ... +155	kph	
Accuracy of speed measurement	± 0.2	kph	
Sensitivity	Corner with radar cross section of 3 dBm ² at distance < 80 m		For azimuth range $-10^\circ \dots +10^\circ$
Emitted radar power (EIRP)	< 12.7	dBm	
Conducted power (antenna input)	< 10	dBm	
Update rate	40	ms	
Antenna			
Antenna principle	Planar antenna combined with digital beam forming		2 Tx columns plus 4 Rx columns
Field of view in azimuth	± 75	$^\circ$	
Field of view in elevation	approx. 12	$^\circ$	For -6 dB point (2-way)
Angle measurement accuracy	± 2 ± 4 ± 5	$^\circ$ $^\circ$ $^\circ$	$\pm 30^\circ$ $\pm 60^\circ$ $\pm 75^\circ$
Vehicle Interface			
Vehicle interface	CAN	2.0b	
Power consumption	4	W	Typically, power supply : 8.5 ... 16V
Mechanical size	90 x 80 x 25 130 x 128 x 27	mm	Width x height x depth (without mount and connector) Width x height x depth (with mount and connector)
Weight	< 170	g	
Mounting area	Application specific		A min. mounting height of 50 cm above ground is recommended due to interference from road reflections
Connector	Sumitomo 6189-1134		10 pins, 2 rows, pin gauge 0.64mm
Vehicle integration	- Concealed in front of grill or behind bumper fascia. - No manual alignment necessary		
Temperature range	-40 ... +85 -40 ... +95	$^\circ\text{C}$ $^\circ\text{C}$	Operating Storage

Contact us to learn more about technical details or the availability of deliverables. Sales Contact / Kontaktadresse:

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Preliminary