

Radar off-highway premium

New generation of radar sensors for outstanding detection of the surroundings.



Image shows a platform variant; subject to technical changes

The off-highway premium radar system offers precision and reliability at automotive level for applications in the off-highway market.



Off-highway applications

Specially optimized solution with flexible configuration, e.g., range setting as a fixed value or depending on the vehicle speed.

Perception

Radar-based monitoring with precise position detection for reliable display of the surroundings.

4D point cloud

Up to 1,024 locations per measuring cycle each with 16 attributes such as position, relative speed, etc.

Data integrity

Extremely robust radar technology against adverse weather and environmental influences: state-of-the-art security implementation.

TECHNICAL DATA	
Frequency range	76 to 77 GHz
Detection range	0.21 m to 300 m
Horizontal field of view	± 60°
Vertical field of view	± 12°
Range accuracy, separability	0.11 m to 0.22 m, 0.41 m to 0.83 m
Horizontal angle accuracy, separability	0.1°, 1.0°
Vertical angle accuracy, separability	0.2°, 1.0°
Velocity accuracy, separability	0.04 m/s, 0.17 m/s
Interfaces	CAN-FD(2 MBaud) / ROS2 / Ethernet T1 100 Mbit/s
Power consumption	~ 12 W¹
Power supply	12 V
Housing dimensions	110 mm x 143 mm x 30 mm
Connector location	Rear
Safety level	ISO 13849 compliant
Interface functions	Output of the 4D point cloud including location attributes

¹ Typical value

