



Outstanding performance for off-highway applications

Assistance system for collision warning in mobile machines



- ▶ Precise information about distances to objects in the field of view of the sensors with accuracy ≤ 2%
- ► Automatic adaption to changing conditions due to sophisticated signal filter technique, interference suppression and multi-channel operation
- ► Set new standards towards robustness during operation at challenging environmental conditions
- ► Diagnostic functionalities like sensor blindness detection ensuring a reliable feedback on actual system performance.
- ► Small and compact sensor design with axial or radial connector orientation







flexible system set-up

Up to 12 ultrasonic sensors controlled by one control unit

high-class performance

Fast detection time and market leading in sensitivity

individual parametrization

Application and installation oriented performance optimization

TECHNICAL CHARACTERISTICS

Detection range	min	15 cm (Ø 7.5 cm tube)
	max	550 cm (Ø 7.5 cm tube)
Object presence		3-15cm
Detection zone	horizontal:	±70°@3dB
	vertical:	±35° @3dB
Ultrasound frequency	modulating	43 to 60 kHz
Sensor output	Distances	3 direct echos + 1 filtered incl. amplitudes
Measurement rate	Sensor	~120 - 240 ms
Update cycle	ECU CAN	40 ms
Protection class	ECU	IP5K2
	Sensor	IP6KX, IPX9K
Com. interface	CAN	CAN ISO 11898
Power supply	ECU	9 to 16 V
Weight	Sensor	~14g
	ECU	~81 g
Dimension	Sensor	Ø23 mm
	ECU	141.4 × 72.8 × 34 mm