

Ultrasonic Sensor System OHW – Entry

Next generation object detection system

Robust central control unit especially designed for mobile machines



off-highway suitable

Hardware with highest protection class and
variable power supply 12/24V

outstanding object detection

Optimized system for tough Off-highway
applications

variable system configuration

Optimal integration in different
machine types

- ▶ Numerous options for application oriented system customization as for instance adjustable sending pattern, sensitivity or distance filter
- ▶ Leading sensor technology in small and compact design with highest accuracy $\leq 2\%$
- ▶ Scalable system size with 4, 6, 8 or 12 ultrasonic sensors controlled by one single system control unit
- ▶ Automatic adaption to changing conditions due to sophisticated signal filter technique, interference suppression and multi-channel operation
- ▶ Diagnostic functionalities like sensor blindness detection ensuring a reliable feedback on actual system performance.

TECHNICAL CHARACTERISTICS

Detection range	min	15 cm (Ø 7,5 cm tube)
	max	550 cm (Ø 7,5 cm tube)
Object presence		3 – 15 cm
Detection zone	horizontal:	$\pm 70^\circ$ @ 3 dB
	vertical:	$\pm 35^\circ$ @ 3 dB
Ultrasound frequency	modulating	43 to 60 kHz
Sensor output	Distances	2 direct echos + 1 filtered incl. amplitudes
Measurement rate	Sensor	~ 120 – 240 ms
Update cycle	ECU CAN	40 ms
Protection class	ECU	IP6K9
	Sensor	IP6KX, IPX9K
Com. interface	CAN	J1939, CAN ISO 11898
Power supply	ECU	9.3 to 31.8V
Weight	Sensor	~ 14 g
	ECU	~ 381 g
Dimension	Sensor	Ø 23 mm
	ECU	190.7 × 118.3 × 40 mm