



ULTRASONIC SENSOR SYSTEM

GENERIC KIT



Valeo Ultrasonic Sensor System is a plug and play kit developed to allow users to easily interface with Valeo Ultrasonic Sensors.

Valeo Ultrasonic sensors are widely-used automotive grade ultrasonic sensors providing SDI (Sensor Distance Interface) and freespace output over CAN.

The system will provide the direct distance detected by each sensor and freespace.

This kit contains twelve ultrasonic sensors, one ECU, sensor holders and one harness, as well as the necessary documents for easy integration and interface.

This kit can be easily integrated into a variety of platforms and for various applications, including but not limited to ADAS, robotaxis, autonomous shuttles and delivery robots.

SPECIFICATIONS

ULTRASONIC SENSOR CHARACTERISTICS	
Frequency	51.2 KHz
Minimum Distance	0.15 m *
Maximum Distance	4.1 m *
Horizontal Field of View	75° **
Vertical Field of View	45° **

POWER	
Power Supply	11-16 V
Power Consumption	6 W

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature Range	-40°C to +85°C
Sensor Protection Class	IP6KX, IPX6X, IPX7, IPX9K
ECU Protection Class	IP42

PHYSICAL CHARACTERISTICS	
Ultrasonic Sensor Dimensions	47 x 28 x 26 mm (H x W x D)
Membrane Diameter	15 mm
Ultrasonic Sensor Weight	15 g
ECU Dimensions	24 x 118 x 82 mm (H x W x D)
ECU Weight	98 g

SYSTEMS COMPONENTS	
HP Ultrasonic Sensors	12
Sensor Holders	12
ECU	1
Harness	1

DATA	
Output	SDI (Sensor Distance Interface)
	Freespace information

INTERFACE	
CAN	250 kbit/s - 1000 kbit/s (adjustable)

* 75mm diameter pipe, Laboratory Conditions: 20°C, 50% rel. air humidity, no disturbance noise
 ** Opening Angle against a flat plate (-3dB)

The kit includes 12 Ultrasonic sensors, generic sensor holder, ECU and harness.



The information found in this document are subject to change.

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