



OHD5001-AC

Overheight Detection System

OBJECT DETECTION SYSTEMS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
OHD5001-AC	1133092

Other models and accessories → www.sick.com/Overheight_Detection_System

Detailed technical data

Features

Sensor	2D LiDAR sensor
Number of covered lanes	Up to 3 tracks
Scanning frequency	25 Hz, for horizontal mounting 100 Hz, for vertical mounting
Scanner design	1-scanner solution
Aperture angle	190°, per LMS511 SE
Version	North America and Latin America
Recommended distance between max. vehicle height and sensor	≥ 1 m, when installed vertically
Heating	✓
Stop-and-go functionality	Yes

Mechanics/electronics

Installation position	Vertical: Overhead or at the side Horizontal: At the side
Installation height	Vertical: 5 m ... 8 m, at least 1 m higher than the maximum vehicle height Horizontal: At height limit
Enclosure rating	IP67 ¹⁾ IP20 ²⁾
Laser class	1, eye-safe (IEC 60825-1:2014)

¹⁾ LMS511 SE.

²⁾ TDC-E.

Performance

Vertical Mounting: height measurement accuracy	± 30 mm, at v < 120 km/h (± 2σ)
Minimum detectable object	Vertical mounting: - ø250 mm at 30 km/h driving speed - ø500 mm at 120 km/h driving speed Horizontal mounting: - ø100 mm at 5 m distance - ø250 mm at 15 m distance
Detection accuracy	Very precise (100% is excluded)

Interfaces

Inputs/outputs	
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¹⁾ Analog measurement of voltage (0 - 36 V) with an accuracy of ±(0.2%+30 mV), current (0 - 32 mA), with an accuracy of ±(1%+0.1 mA), input resistance 27.5 kΩ typical for voltage mode, 100 Ω typical for current mode.

		I/O	6 analog inputs (configurable, current and voltage), 6 digital inputs/outputs (configurable), 2 additional digital inputs, 2 additional digital outputs ¹⁾
Ethernet	Data transmission rate		10 Mbit/s ... 1,000 Mbit/s
			≤ 150 Mbit/s, Full 4G performance cannot be guaranteed on operating temperature over 60°C.
	Electrical connection		RJ45
Wireless LAN	Data transmission rate		≤ 65 Mbit/s, single band 2.4 GHz
		Protocol	IEEE 802.11 b/g/n
	Output data		Timestamp Overheight alarm Lane assignment

¹⁾ Analog measurement of voltage (0 - 36 V) with an accuracy of $\pm(0.2\%+30 \text{ mV})$, current (0 - 32 mA), with an accuracy of $\pm(1\%+0.1 \text{ mA})$, input resistance 27.5 kΩ typical for voltage mode, 100 Ω typical for current mode.

General notes

Items supplied	2D LiDAR sensor LMS511 SE (1x) TDC-E incl. software Cables Mounting bracket Weather hood
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SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

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