SICK.COM



DATA SHEET

OHD5001-AC

Overheight Detection System
Object detection systems

SICK Sensor Intelligence



OBJECT DETECTION SYSTEMS

OHD5001-AC

ORDERING INFORMATION

Type	part no.
OHD5001-AC	1133092

Further device versions and accessories at 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	
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 ±(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.

GENERAL NOTES

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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1133092

SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK

Sensor Intelligence