LD-LRS3601

LD-LRS

2D LIDAR SENSORS

SICK
Sensor Intelligence.

LD-LRS3601 | LD-LRS

2D LIDAR SENSORS

Ordering information

Type	part no.
LD-LRS3601	1060832

Other models and accessories ➜ www.sick.com/LD-LRS

Detailed technical data

Features

Application		Outdoor, Indoor
Light source		Infrared (905 nm)
Laser class		1 (IEC 60825-1:2014, EN 60825-1:2014+A11:2021)
Aperture angle		
	Horizontal	360°
Scanning frequency		5 Hz ... 15 Hz
Angular resolution		
	Horizontal	0.0625°, interlaced
		0.125°
		0.1875°
		0.25°
		0.375°
		0.5°
		0.75°
		1°
Heating		Yes
Working range		2.5 m ... 250 m
Scanning range		
	At 10% remission factor	80 m
	At 90% remission factor	250 m

Mechanics/electronics

Connection type	1 x 20-pin Harting plug [1]
Supply voltage	24 V DC, ± 15 %

[1] Harting.

Power consumption	36 W, + 140 W heating
Housing material	PU (polyurethane rigid integral foam)
Housing color	Gray (RAL 7032)
Enclosure rating	IP67
Protection class	III
Weight	+ 9.1 kg
Dimensions (L x W x H)	250 mm x 350 mm x 391.1 mm
MTBF	86 years
MTTFd	> 100 years

[1] Harting.

Safety-related parameters

MTTF$_D$	> 100 years

Performance

Detectable object shape	Almost any
Systematic error	± 38 mm [1]
Statistical error	30 mm [1]

[1] Actual value depends on environmental conditions.

Interfaces

Ethernet	✓ , TCP/IP
Data transmission rate	≤ 100 Mbit/s
Serial	✓ , RS-422
Data transmission rate	19,200 Baud … 115,200 Baud
Digital inputs/outputs	
Outputs	1 (digital)
Optical indicators	0

Ambient data

Ambient operating temperature	–25 °C … +50 °C
Storage temperature	–25 °C … +80 °C

General notes

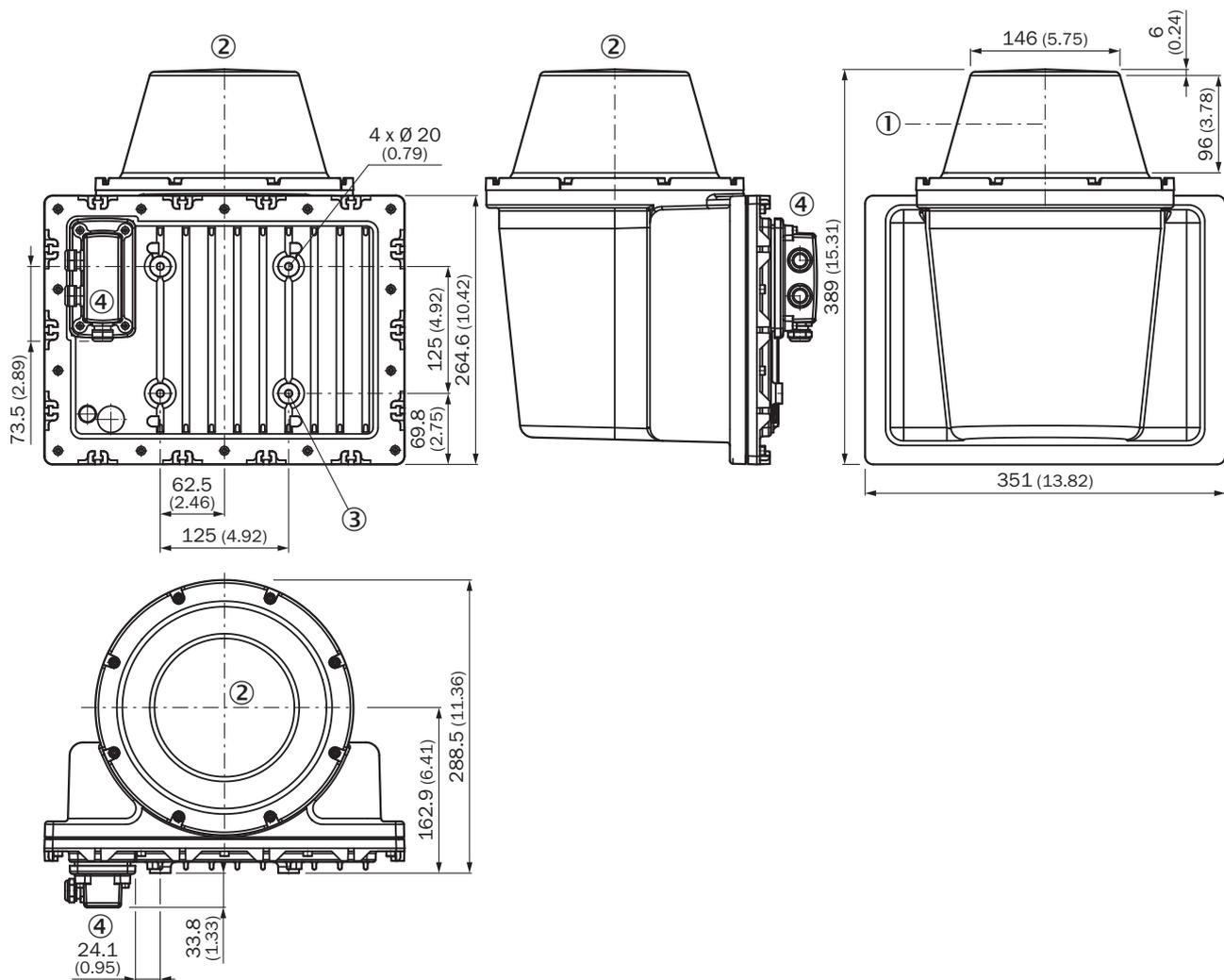|	
Note on use	The sensor does not constitute a safety component as defined by relevant legislation on machine safety.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
KC Mark certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

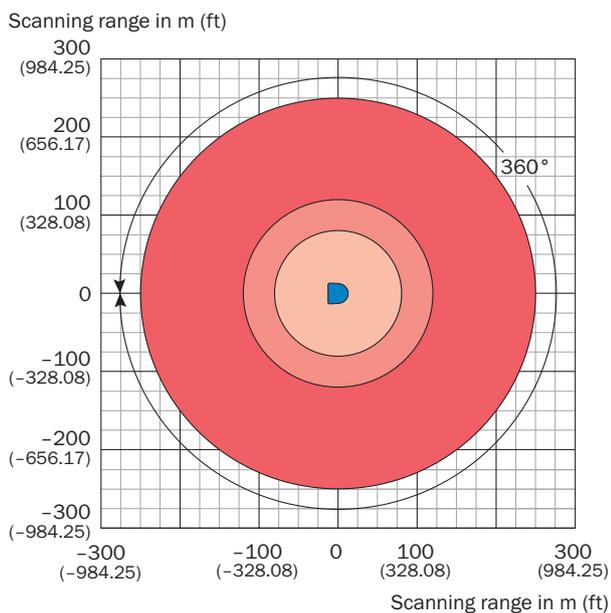|	
ECLASS 5.0	27270990
ECLASS 5.1.4	27270990
ECLASS 6.0	27270913
ECLASS 6.2	27270913
ECLASS 7.0	27270913
ECLASS 8.0	27270913
ECLASS 8.1	27270913
ECLASS 9.0	27270913
ECLASS 10.0	27270913
ECLASS 11.0	27270913
ECLASS 12.0	27270913
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	41111615

Dimensional drawing

Dimensions in mm (inch)
① Optical axis
② Zero level
③ Mounting hole M6 threaded –9 mm deep
④ RS-232/Ethernet/Power connection (20-pin harting connector)

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Working range diagram

Scanning range in m (ft)

Scanning range in m (ft)

■ Scanning range max. 250 m (820.21 ft)

■ Scanning range white targets
90 % remission 250 m (820.21 ft)

■ Scanning range for objects up to
10 % remission 120 m (393.70 ft) Extended

■ Scanning range for objects up to
10 % remission 80 m (262.47 ft)

Recommended accessories

Other models and accessories ➜ www.sick.com/LD-LRS

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Mounting kit for wall-mounting (adjustment bracket) • **Material:** Steel • **Details:** Steel, zinc coated (1.0330)	Mounting kit	2018303

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:

Contacts and other locations –**www.sick.com**

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