



RAS407-2801100

RAS4xx

RADAR SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
RAS407-2801100	1072146

Other models and accessories → www.sick.com/RAS4xx

Detailed technical data

Features

Measurement principle	FMCW HF
Radio approval	Europe ¹⁾
Frequency band	24 GHz ... 24.25 GHz ²⁾
Aperture angle	Horizontal ± 3.5°
	Vertical ± 14°
Working range	0.2 m ... 20 m

¹⁾ Except UK and France.

²⁾ Other values are permitted for compliance with country-specific regulations.

Mechanics/electronics

Connection type	1 x Cable open end
Supply voltage	10 V DC ... 30 V DC
Power consumption	8 W
Housing color	Gray
Enclosure rating	IP65
Protection class	III ¹⁾
Weight	1,080 g
Dimensions (L x W x H)	101 mm x 151 mm x 60 mm ²⁾
	101 mm x 151 mm x 60 mm ³⁾
MTBF	56 years

¹⁾ When using SELV or PELV power supply units.

²⁾ Evaluation unit.

³⁾ Sender/receiver unit.

Safety-related parameters

MTTF_D	> 100 years
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Performance

Response time	< 0.5 s
Integrated application	Collision avoidance
Number of field sets	3 fields

Interfaces

USB	✓
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Function	Parameterization
Digital outputs	3 (relays)

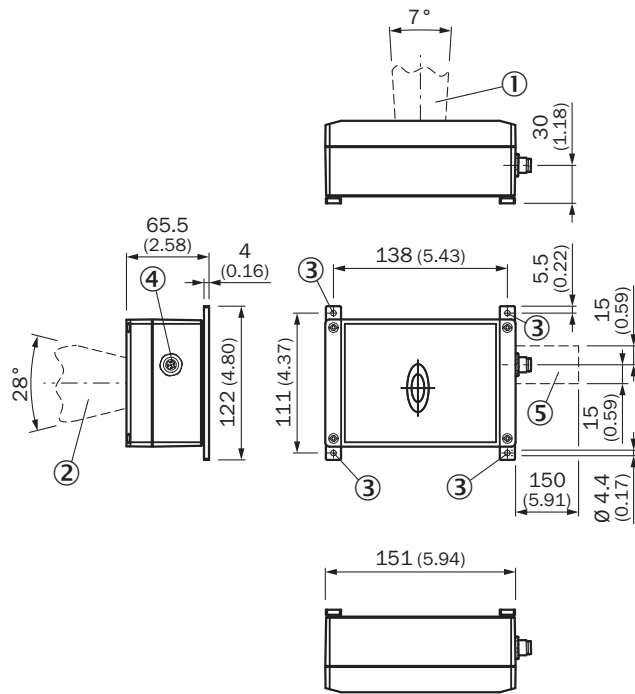
Ambient data

Electromagnetic compatibility (EMC)	ETSI EN 301 489-1 / ETSI EN 301 489-3
Vibration resistance	EN 60068-2-6 EN 60068-2-64
Shock resistance	EN 60068-2-27
Ambient operating temperature	-20 °C ... +60 °C
Storage temperature	-20 °C ... +60 °C

Classifications

ECLASS 5.0	27270890
ECLASS 5.1.4	27270890
ECLASS 6.0	27270890
ECLASS 6.2	27270890
ECLASS 7.0	27270890
ECLASS 8.0	27270890
ECLASS 8.1	27270890
ECLASS 9.0	27270890
ECLASS 10.0	27270807
ECLASS 11.0	27270807
ECLASS 12.0	27274501
ETIM 5.0	EC001825
ETIM 6.0	EC001825
ETIM 7.0	EC001825
ETIM 8.0	EC001825
UNSPSC 16.0901	39121528

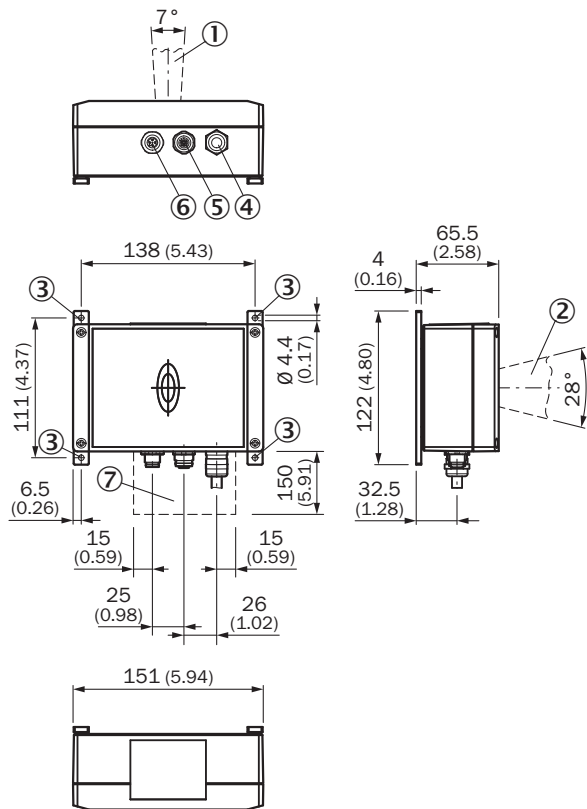
Dimensional drawing RAS407-280xxx



Dimensions in mm (inch)

- ① angle horizontal
- ② angle vertical
- ③ Mounting holes, 4 x Ø 4.4 mm
- ④ connection for controller unit
- ⑤ Recommended free space for connections

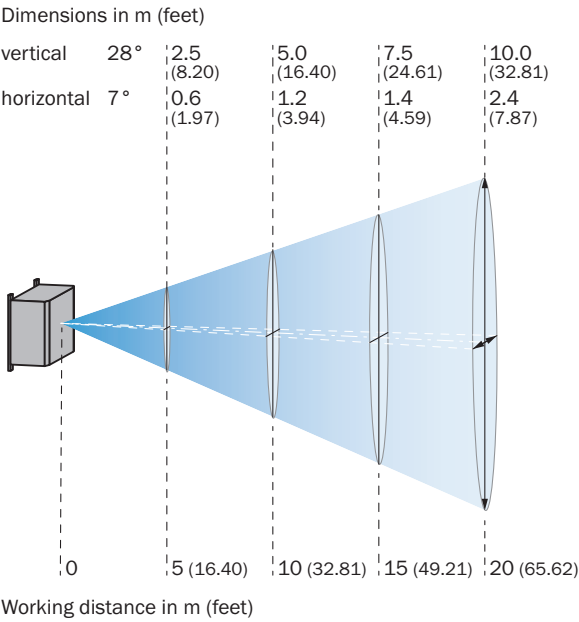
Dimensional drawing RAS407-28011xx



Dimensions in mm (inch)

- ① angle horizontal
- ② angle vertical
- ③ Mounting holes, 4 x Ø 4.4 mm
- ④ power supply
- ⑤ USB port
- ⑥ sensor unit connection
- ⑦ Recommended free space for connections

Detection area RAS407



Recommended accessories

Other models and accessories → www.sick.com/RAS4xx

	Brief description	Type	part no.
Mounting systems			
	• Description: Pivot mounting bracket, incl. assembly material	Mounting bracket	2061737
connectors and cables			
	• Connection type head A: Male connector, USB, 5-pin • Connection type head B: Male connector, M12 • Signal type: USB 2.0 • Cable: 3 m • Description: USB 2.0, unshielded	YM2Z15-030XXXMUSAX	2079580

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