



MICS3-AAUZ40AZ1P01

outdoorScan3

SAFETY LASER SCANNERS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
MICS3-AAUZ40AZ1P01	1094452

Other models and accessories → www.sick.com/outdoorScan3

Detailed technical data

Features

Protective field range	4 m
Warning field range	40 m
Number of simultaneously monitored fields	≤ 4 ^{1) 2)}
Number of fields	8 ³⁾
Number of monitoring cases	2
Scanning angle	275°
Resolution (can be configured)	50 mm 70 mm
Angular resolution	0.39°
Response time	≥ 90 ms
Protective field supplement	65 mm

¹⁾ Protection or warning fields.

²⁾ Please note the number of available OSSD pairs.

³⁾ Please note the number of available inputs and OSSD pairs.

Safety-related parameters

Type	Type 3 (IEC 61496)
Safety integrity level	SIL2 (IEC 61508) SILCL2 (EN 62061)
Category	Category 3 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
Performance class SRS/SRSS	Performance class D (IEC/TS 62998)
PFH_D (mean probability of a dangerous failure per hour)	8.0 x 10 ⁻⁸ (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)
Safe state in the event of a fault	In each OSSD pair, at least one OSSD is in the OFF state.

Functions

Restart interlock	✓
External device monitoring (EDM)	✓
Multiple sampling	✓
Monitoring case switching	✓
Simultaneous monitoring	✓
Static protective field switching	✓
Integrated configuration memory	✓
Measured data output	None

Interfaces

Connection type	Male connector, M12, 8 pin, A-coded (common male connector for power supply and inputs and outputs)
Universal I/Os	3
Outputs	
OSSD pairs	1
Configuration method	PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface	USB 2.0, Mini-USB
Display elements	Graphic color display, LEDs

Electrical data

Protection class	III (EN 61140)
Supply voltage V_s	24 V DC (16.8 V DC ... 30 V DC)
Power consumption	7 W (without output load)

Mechanical data

Dimensions (W x H x D)	112 mm x 135 mm x 111 mm
Weight	1.15 kg
Housing material	Aluminum
Housing color	RAL 2004 (pure orange), RAL 9005 (black)
Optics cover material	Polycarbonate
Optics cover surface finish	Outside with scratch-resistant coating

Ambient data

Enclosure rating	IP65 (IEC 60529)
Ambient light immunity	
Halogen light	≤ 12,000 lx (IEC 61496-3)
Sunlight	≤ 40,000 lx (IEC 61496-3)
Ambient operating temperature	-25 °C ... +50 °C
Storage temperature	-25 °C ... +70 °C
Ambient conditions	
Rain	10 mm/h ¹⁾
Snowfall	≤ 3 mm/h (SWE, Snow Water Equivalent) ¹⁾
Fog	≥ 50 m (MOR, Meteorological Optical Range) ¹⁾

¹⁾ More detailed data can be found in the operating instructions, chapter "Project planning".

Vibration resistance	0.35 mm, 10 Hz ... 60 Hz (IEC 60068-2-6, IEC 61496-1, CLC/TS 61496-3) 5 g, 60 Hz ... 150 Hz (IEC 60068-2-6, IEC 61496-1, CLC/TS 61496-3)
Shock resistance	
Continuous shock	10 g, 16 ms (IEC 60068-2-27, IEC 61496-3)
EMC	IEC 61496-1 IEC 61000-6-2 IEC 61000-6-4

¹⁾ More detailed data can be found in the operating instructions, chapter "Project planning".

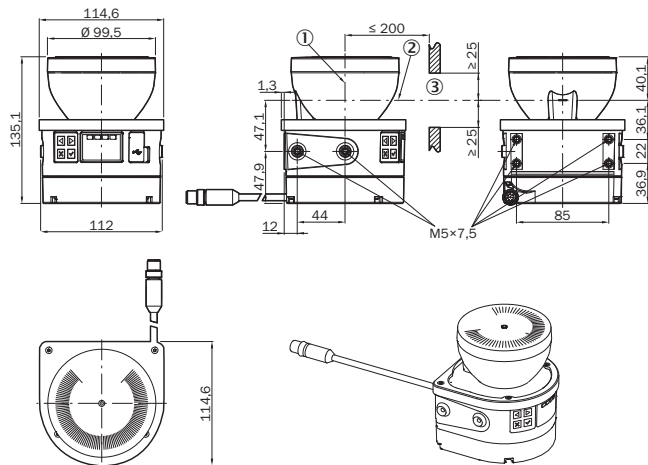
Other information

Type of light	Pulsed laser diode
Wave length	845 nm
Detectable remission	1.8% to several 1000%
Laser class	1M (21 CFR 1040.10 and 1040.11, IEC 60825-1)

Classifications

ECl@ss 5.0	27272705
ECl@ss 5.1.4	27272705
ECl@ss 6.0	27272705
ECl@ss 6.2	27272705
ECl@ss 7.0	27272705
ECl@ss 8.0	27272705
ECl@ss 8.1	27272705
ECl@ss 9.0	27272705
ECl@ss 10.0	27272705
ECl@ss 11.0	27272705
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
UNSPSC 16.0901	39121528







Dimensional drawing (Dimensions in mm (inch))




- ① Mirror axis of rotation
- ② Scan plane
- ③ Required viewing slit

Recommended accessories

Other models and accessories → www.sick.com/outdoorScan3

	Brief description	Type	Part no.
Device protection (mechanical)			
	Weather hood (only in conjunction with mounting kit 3)	Weather hood	2103050
Mounting brackets and plates			
	1 piece, mounting bracket	Mounting kit 1a	2073851
	1 piece, mounting bracket with protection of optics hood	Mounting kit 1b	2074242
	1 piece, alignment bracket, alignment with cross-wise axis and depth axis possible, distance between mounting surface and device: 22.3 mm, only in conjunction with mounting kit 1a (2073851) or 1b (2074242)	Mounting kit 2a	2073852
	1 piece, Alignment bracket, alignment with cross-wise axis and depth axis possible, distance between mounting surface and device: 52.3 mm, only in conjunction with mounting kit 1a (2073851) or 1b (2074242)	Mounting kit 2b	2074184
	1 piece, Alignment bracket with protection for the optics cover, alignment with cross-wise axis and depth axis possible	Mounting kit 3	2103049

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, shielded, 2 m	YF2A68-020UA7XLEAX	2108120
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, shielded, 30 m	YF2A68-300UA7XLEAX	2108133

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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.”

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