



# S32B-3011EA

S300 Mini

**SAFETY LASER SCANNERS** 





## Ordering information

Туре	part no.
S32B-3011EA	1056431

Other models and accessories → www.sick.com/S300\_Mini

Illustration may differ



## Detailed technical data

#### **Features**

Usage	Can only be used in the EFI system network, e.g., with a Flexi Soft safety controller and an additional S300 or S3000 safety laser scanner
Product version	S300 Mini Remote
Application	Indoor
Protective field range	3 m
Warning field range	8 m (at 15 % reflectivity)
Distance measuring range	30 m
Type of field set	Triple field sets
Number of field sets	16
Number of fields	48
Number of monitoring cases	32
Scanning angle	270°
Resolution (can be configured)	30 mm, 40 mm, 50 mm, 70 mm, 150 mm
Angular resolution	0.5°
Response time	80 ms <sup>1)</sup>
Protective field supplement	100 mm
Number of multiple samplings	2 16, configurable
Delay of automatic reset	2 s 60 s, configurable

 $<sup>^{1)}</sup>$  Depending on basic response time and multiple sampling.

## Safety-related parameters

Туре	Type 3 (IEC 61496)
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Safety integrity level	SIL 2 (IEC 61508)
Category	Category 3 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	8.0 x 10 <sup>-8</sup>
T <sub>M</sub> (mission time)	20 years (EN ISO 13849)

## **Functions**

Multiple sampling	✓
Monitoring case switching	✓
Static protective field switching	✓
Dynamic protective field switching	✓
Contour as a reference	✓
Measured data output	None
Safe SICK device communication via EFI	✓

## Interfaces

Connection type	Cable, 250 mm, with male connector M12, 7-pin
Inputs	
Static control inputs with EFI	5 <sup>1)</sup>
Standby	1 <sup>1)</sup>
Outputs	
	Depends on the configuration of the connected EFI device
Configuration method	PC with CDS (Configuration and Diagnostic Software)
Configuration and diagnostics interface	RS-232
Transmission rate	38.4 kBaud
Safe SICK device communication via EFI	
Transmission rate	≤ 500 kBaud
Length of cable	$\leq$ 20 m $^{2)}$

 $<sup>^{1)}</sup>$  Can only be used in the EFI system network, e.g., with a Flexi Soft safety controller and an additional S300 or S3000 safety laser scanner.

## **Electronics**

Protection class	III (EN 50178, EN 60950)
Supply voltage $V_{\rm s}$	24 V DC (16.8 V DC 30 V DC)
Power consumption	0.22 A <sup>1)</sup> 0.24 A <sup>2)</sup>

 $<sup>^{1)}</sup>$  At 24 V DC without output load.

#### Mechanics

Dimensions (W x H x D)	102 mm x 116 mm x 105 mm
Weight	0.8 kg, without connecting cables
Housing material	Aluminum die cast

<sup>&</sup>lt;sup>2)</sup> Only preassembled extension cables permitted.

<sup>&</sup>lt;sup>2)</sup> At 24 V DC including maximum output load.

## SAFETY LASER SCANNERS

Housing color	RAL 1021 (yellow), RAL 9005 (black)
Optics cover material	Polycarbonate
Optics cover surface finish	Outside with scratch-resistant coating

## Ambient data

Enclosure rating	IP65 (EN 60529)
Ambient operating temperature	-10 °C +50 °C
Storage temperature	-25 °C +50 °C
Vibration resistance	IEC 60068-2-6, IEC 60068-2-64, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3
Class	5M1 (IEC 60721-3-5)
Shock resistance	IEC 60068-2-27, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3
Class	5M1 (IEC 60721-3-5)
Continuous shock	50 m/s², 11 ms
	100 m/s², 16 ms

## Other information

Type of light	Pulsed laser diode
Wave length	905 nm
Detectable remission factor	1.8 % > 1,000 %, reflectors
Laser class	1 (21 CFR 1040.10 and 1040.11, IEC 60825-1)

## Certificates

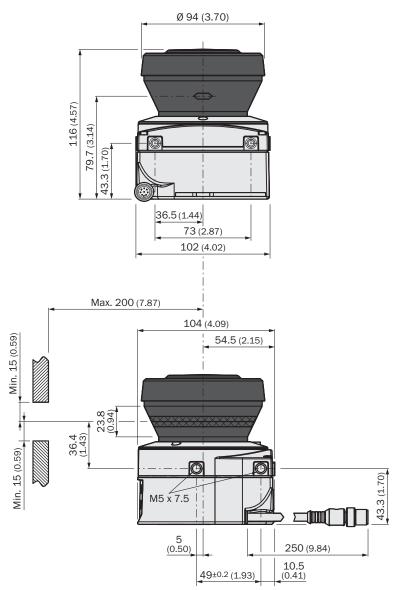
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
EC-Type-Examination approval	✓
China GB certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

## Classifications

ECLASS 5.0	27272705
ECLASS 5.1.4	27272705
ECLASS 6.0	27272705
ECLASS 6.2	27272705
ECLASS 7.0	27272705
ECLASS 8.0	27272705
ECLASS 8.1	27272705
ECLASS 9.0	27272705
ECLASS 10.0	27272705
ECLASS 11.0	27272705
ECLASS 12.0	27272705
ETIM 5.0	EC002550

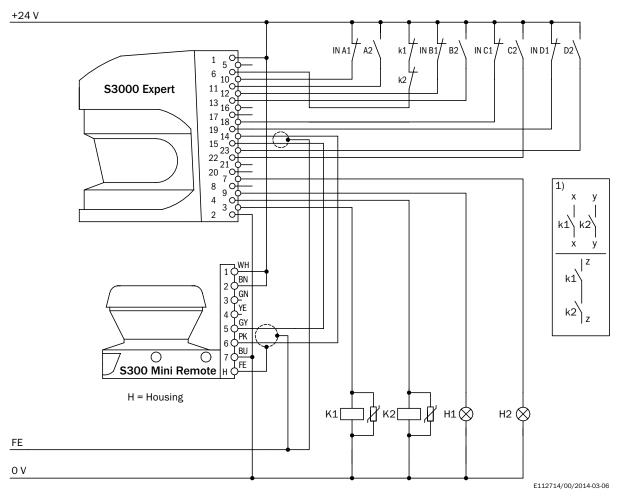
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	39121528

## Dimensional drawing Laser scanner



Dimensions in mm (inch)

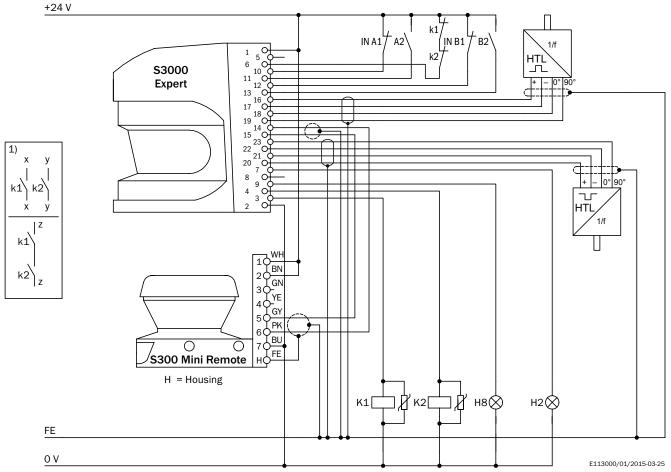
Connection diagram Protective field switching between an S3000 Expert and an S300 Mini Remote with static inputs



#### Comments

<sup>&</sup>lt;sup>1)</sup> Output circuits: These contacts are to be connected to the controller such that, with the output circuit open, the dangerous state is disabled. For categories 4 and 3, this integration must be dual-channel (x/y paths). Single-channel insertion in the control (z path) is only possible with a single-channel control and by taking the risk analysis into account.

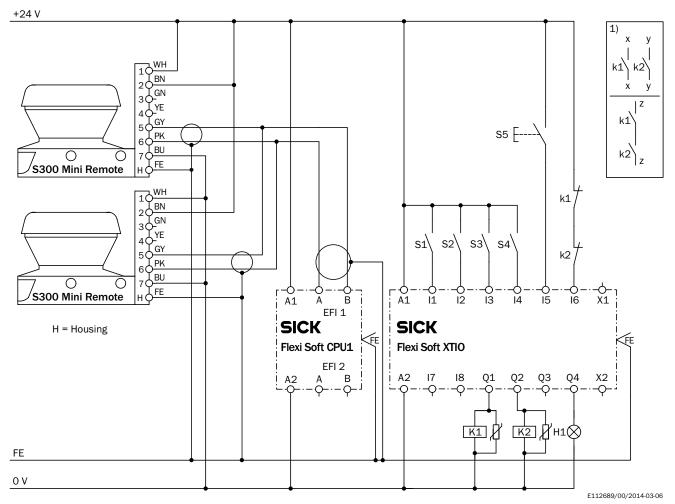
Connection diagram Protective field switching between an S3000 Expert and an S300 Mini Remote with static and dynamic inputs



#### **Comments**

<sup>&</sup>lt;sup>1)</sup> Output circuits: These contacts are to be connected to the controller such that, with the output circuit open, the dangerous state is disabled. For categories 4 and 3, this integration must be dual-channel (x/y paths). Single-channel insertion in the control (z path) is only possible with a single-channel control and by taking the risk analysis into account.

## Connection diagram S300 Mini Remote: Protective field switch with the help of a Flexi Soft safety controller



#### **Comments**

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## Recommended accessories

Other models and accessories → www.sick.com/S300\_Mini

	Brief description	Туре	part no.		
Mounting systems					
	Description: Mounting bracket for rear mounting on wall or machine     Packing unit: 1 piece	Mounting kit 1a	2034324		
K	Description: Mounting bracket for rear mounting on wall or machine with protection of optics hood     Packing unit: 1 piece	Mounting kit 1b	2034325		
	Description: Mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)     Packing unit: 1 piece	Mounting kit 2	2039302		
	<ul> <li>Description: Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)</li> <li>Packing unit: 1 piece</li> </ul>	Mounting kit 3	2039303		
connectors and cables					
	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Unshielded</li> </ul>	DSL-8U04G02M025KM:	6034574		
	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Unshielded</li> </ul>	DSL-8U04G10M025KM:	6034575		
No.	<ul> <li>Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded</li> <li>Connection type head B: Flying leads</li> <li>Cable: 10 m, 8-wire</li> <li>Description: Shielded</li> <li>Note: Extension cable S300 Mini Remote</li> </ul>	DOL-1SS2G10ME15KM	6042340		
No.	<ul> <li>Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded</li> <li>Connection type head B: Flying leads</li> <li>Cable: 15 m, 8-wire</li> <li>Description: Shielded</li> <li>Note: Extension cable S300 Mini Remote</li> </ul>	DOL-1SS2G15ME15KM	6042341		
No.	Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 2.5 m, 8-wire Description: Shielded Note: Extension cable S300 Mini Remote	DOL-1SS2G2M5E15KM	6042337		
No.	Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 20 m, 8-wire Description: Shielded Note: Extension cable S300 Mini Remote	DOL-1SS2G20ME15KM?	6042342		
Vo	Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 5 m, 8-wire Description: Shielded Note: Extension cable S300 Mini Remote	DOL-1SS2G5M0E15KM	6042338		
	Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 7.5 m, 8-wire Description: Shielded Note: Extension cable S300 Mini Remote	DOL-1SS2G7M5E15KM	6042339		

## 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

