



S32B-3011EA

S300 Mini

SAFETY LASER SCANNERS

SICK
Sensor Intelligence.

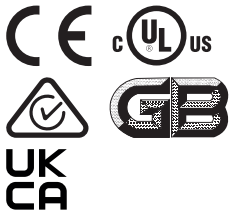


Ordering information

Type	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 ¹⁾
Protective field supplement	100 mm
Number of multiple samplings	2 ... 16, configurable
Delay of automatic reset	2 s ... 60 s, configurable

¹⁾ Depending on basic response time and multiple sampling.

Safety-related parameters

Type	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)
PFH_D (mean probability of a dangerous failure per hour)	8.0 x 10 ⁻⁸
T_M (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 ¹⁾
Standby	1 ¹⁾
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	≤ 20 m ²⁾

¹⁾ 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.

²⁾ Only preassembled extension cables permitted.

Electronics

Protection class	III (EN 50178, EN 60950)
Supply voltage V_s	24 V DC (16.8 V DC ... 30 V DC)
Power consumption	0.22 A ¹⁾ 0.24 A ²⁾

¹⁾ At 24 V DC without output load.

²⁾ At 24 V DC including maximum 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

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/s ² , 11 ms 100 m/s ² , 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

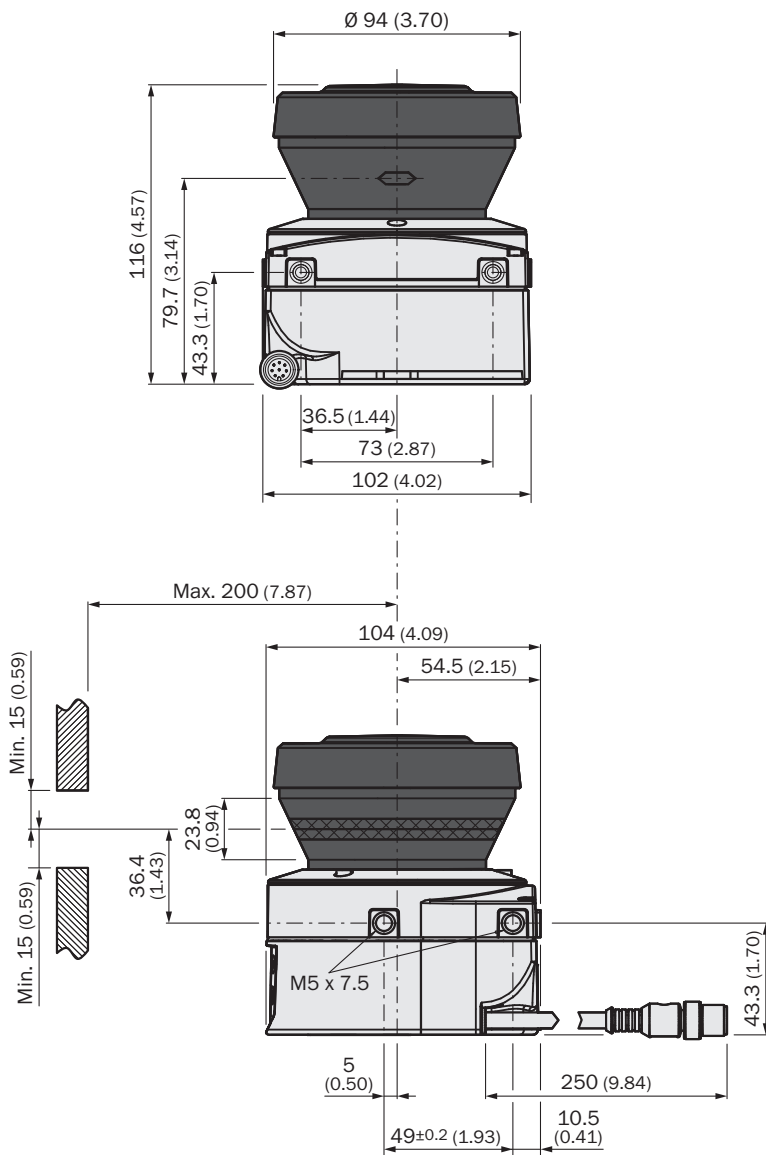
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
EC-Type-Examination approval	✓
China GB certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

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

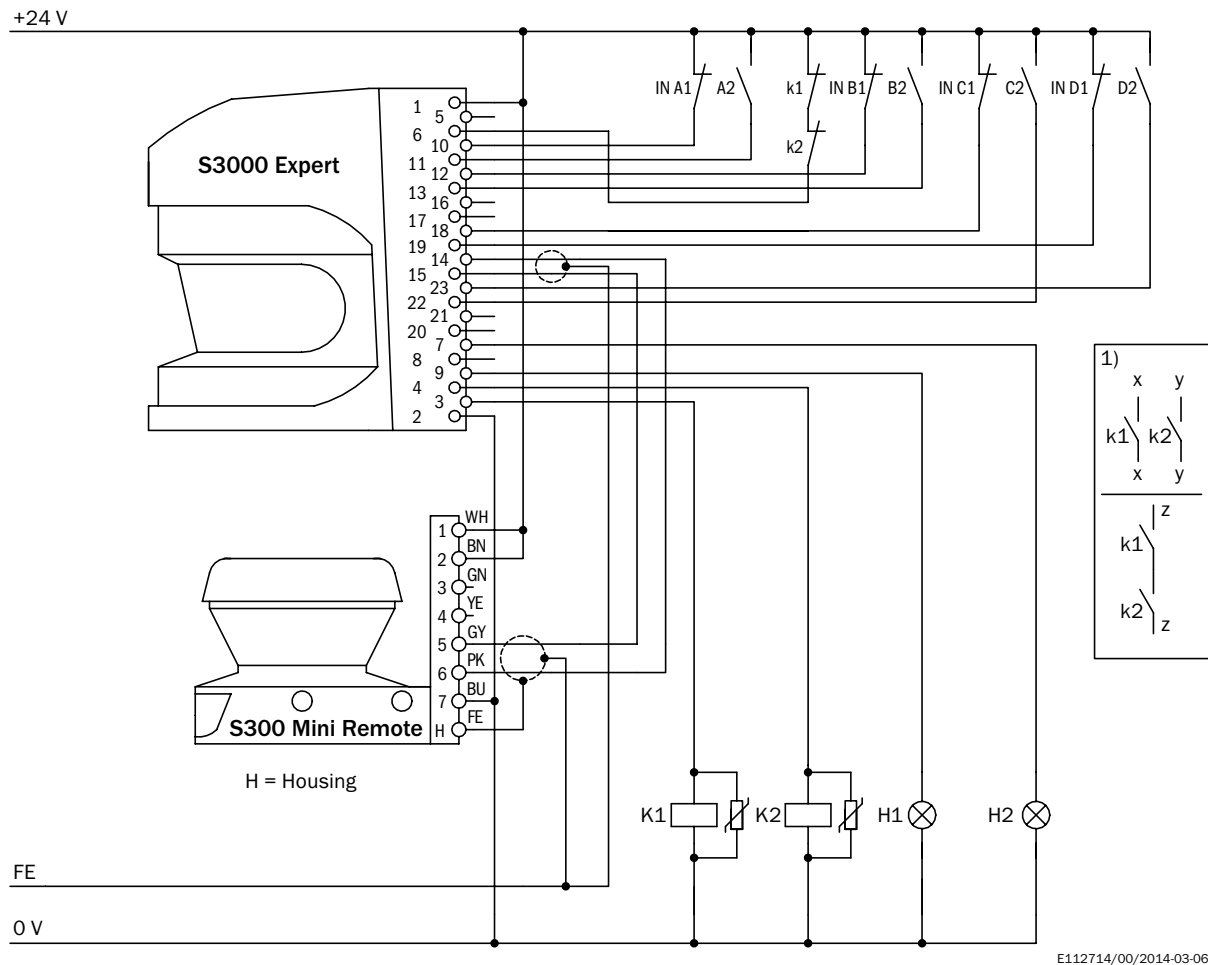
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	39121528

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

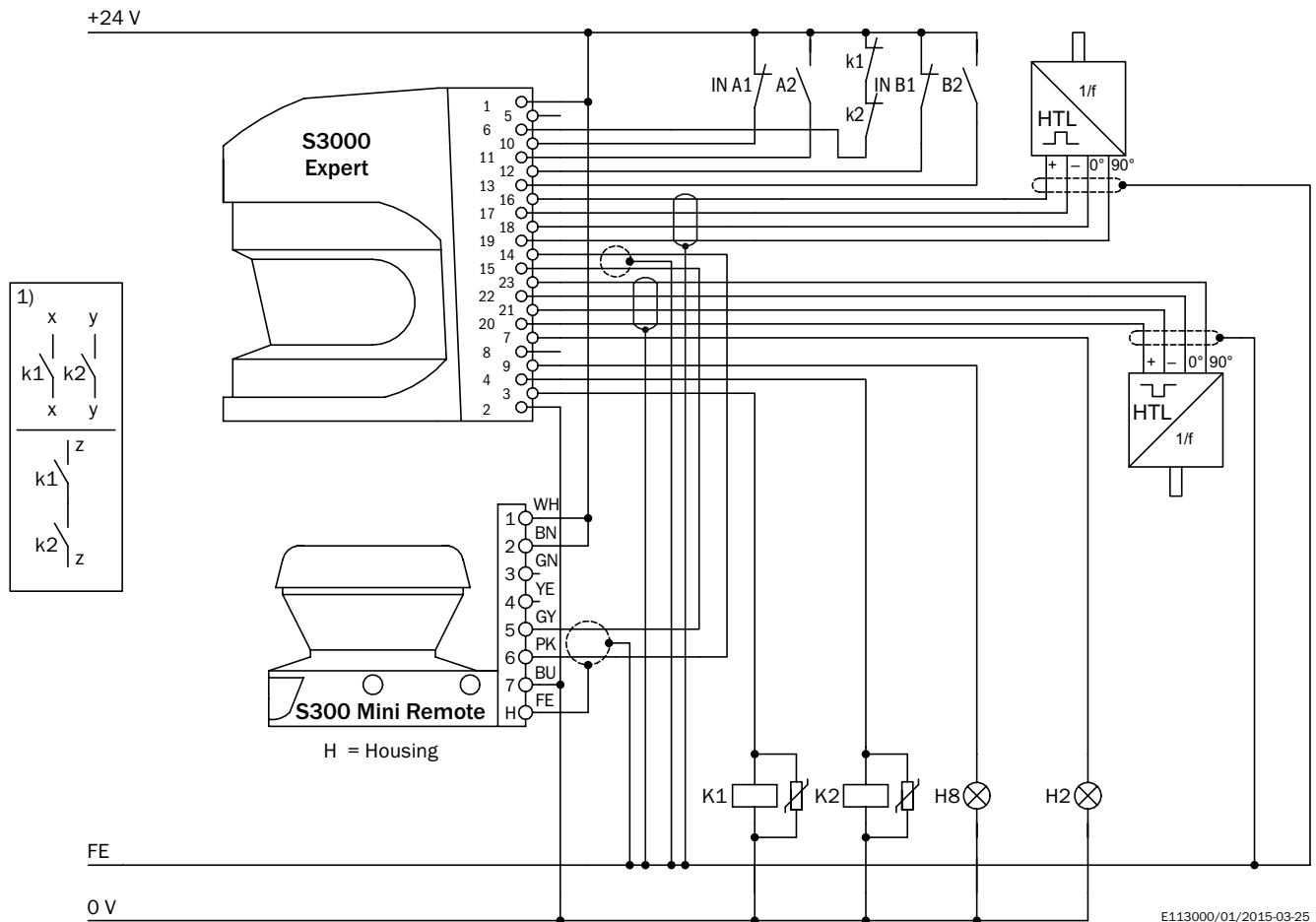


E112714/00/2014-03-06

Comments

¹⁾ 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

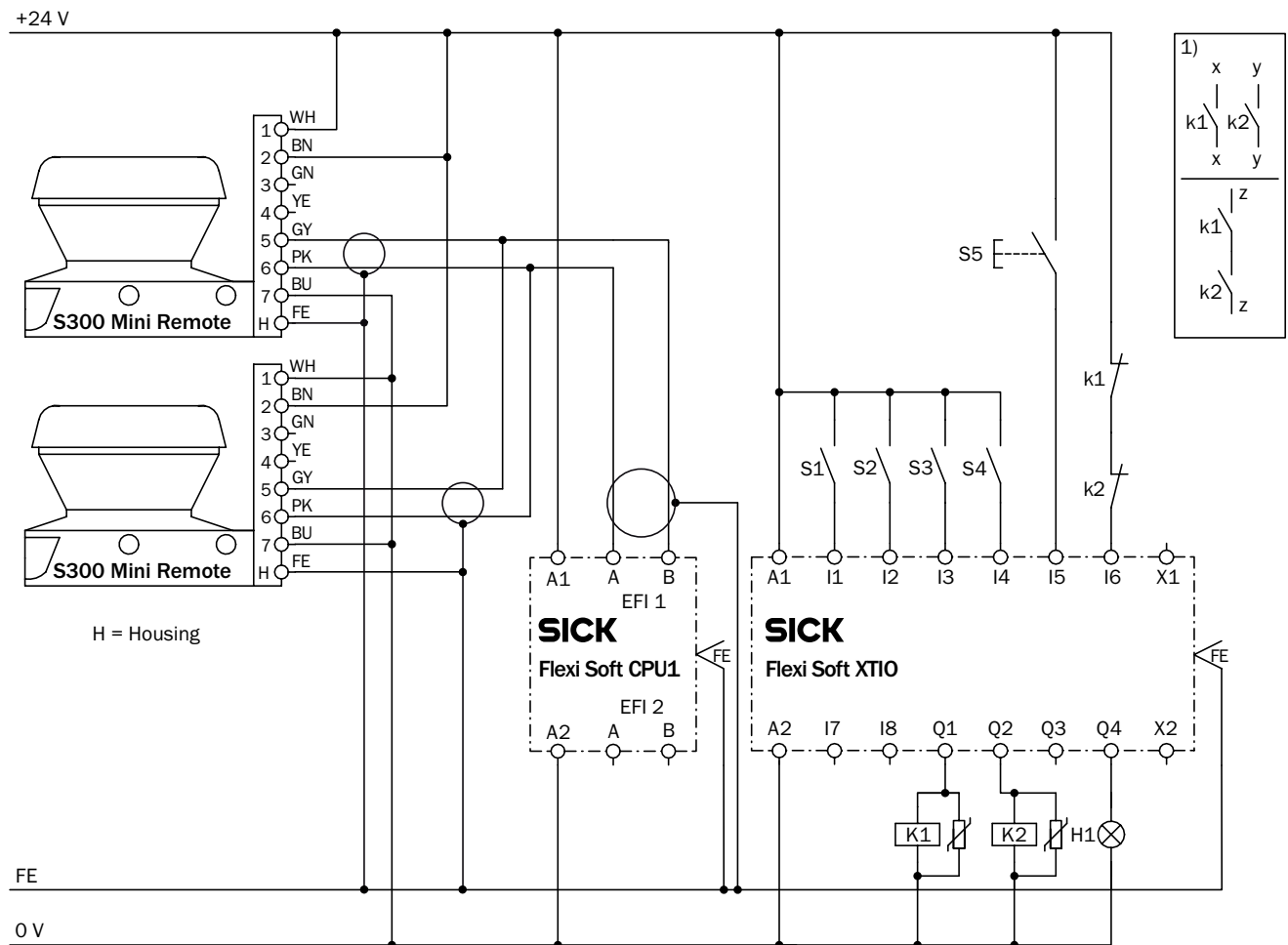


E113000/01/2015-03-25

Comments

¹⁾ 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

¹⁾ 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.

Recommended accessories

Other models and accessories → www.sick.com/S300_Mini

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> Description: Mounting bracket for rear mounting on wall or machine Material: Anodized aluminum Details: AlMg3, black anodized Packing unit: 1 piece Items supplied: Mounting bracket, 4 x M5 x 10 countersunk screws 	Mounting kit 1a	2034324
	<ul style="list-style-type: none"> Description: Mounting bracket for rear mounting on wall or machine with protection of optics hood Material: Anodized aluminum Details: AlMg3, black anodized Packing unit: 1 piece Items supplied: Mounting bracket, 4 x M5 x 10 countersunk screws 	Mounting kit 1b	2034325
	<ul style="list-style-type: none"> Description: Mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325) Material: Anodized aluminum Details: AlMg3, black anodized Packing unit: 1 piece Items supplied: Mounting bracket, 4 x countersunk screws with washers M4 x 10, 4 x spring washer 	Mounting kit 2	2039302
	<ul style="list-style-type: none"> Description: Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302) Material: Anodized aluminum Details: AlMg3, black anodized Packing unit: 1 piece Items supplied: Mounting plate, 2 x countersunk screws with washers M4 x 10, 2 x spring washer 	Mounting kit 3	2039303

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> Description: Unshielded Connection type head A: Male connector, M8, 4-pin, straight Connection type head B: Male connector, USB-A, straight Cable: 2 m, 4-wire, PVC 	DSL-8U04G02M025KM3	6034574
	<ul style="list-style-type: none"> Description: Unshielded Connection type head A: Male connector, M8, 4-pin, straight Connection type head B: Male connector, USB-A, straight Cable: 10 m, 4-wire, PVC 	DSL-8U04G10M025KM3	6034575
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 10 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G10ME15KM3	6042340
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 15 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G15ME15KM3	6042341
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 2.5 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G2M5E15KM3	6042337
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 20 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G20ME15KM3	6042342
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 5 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G5M0E15KM3	6042338
	<ul style="list-style-type: none"> Description: Shielded Connection type head A: Female connector, M12, 7-pin, straight, SICK-coded Connection type head B: Flying leads Cable: 7.5 m, 8-wire Note: Extension cable S300 Mini Remote 	DOL-1SS2G7M5E15KM3	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