



SSP

Safety System Products

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

Safety Simplifier | for two tGard SMDU

Your advantages

- 14 I/O's as safety Inputs or redundant OSSD-Outputs
- wireless Interface for safe communication, programming & diagnosis
- IP65
- 40mm width for aluminium safety fence systems



To the downloads ►

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With the Safety Simplifier we take safety where it is needed and we provide safety where it is needed with the Safety Simplifier and make it easier for you to develop user-friendly safety systems, such as on access doors. Simply connect up your sensors, locking systems or light curtains. Select the required push button and/or emergency stop button and you have a complete safety solution with analysis and diagnosis functions. This data is wirelessly transmitted via another Safety Simplifier or directly transmitted to your existing system in a fail-safe manner.

General data

Type designation	S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20
Item number	SP-X-89-000-60
Functional type	Safety PLC with safe wireless interface, internal antenna

Button position 1

Type designation	E2
Function type	Emergency- Stop-Button

Button position 2

Type designation	I1
Function type	Illuminated Button

Button position 3

Type designation	I1
Function type	Illuminated Button

Button position 4

Type designation	I1
Function type	Illuminated Button
Colour	red, yellow, green, blue, white

Connection

- Position 2	Q2J - connector female M12 12-Pin
- Position 3	Q3C - connector male M12 5-Pin
- Position 4	Q4J - connector female M12 12-Pin

Safety data

CPU

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Safety System Products

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
1-channel input	
- EN ISO 13849-1: 2008	Category 2
- IEC 61508-2	SIL CL 2
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2-channel input	
- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
1-channel OSSD output	
- EN ISO 13849-1: 2008	Category 2
- IEC 61508-2	SIL CL 2
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2- channel OSSD Output	
- EN ISO 13849-1: 2008	Category 4
- IEC 61508-2	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
2- channel relais output	
- EN ISO 13849-1: 2008	Category 4
- EN 62061 SIL CIL	SIL CL 3
- EN 62061 PFHD [1/h]	□
- EN ISO 13849-1: 2008 TM [Year]	20
- B10d	1.000.000
Approvals	CE, TÜV
Environmental conditions	
Max. storage temperature	-20 °C ... +65 °C

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

Max. operating temperature

-20 °C ... +65 °C

Electrical data

Technical data wireless safety

- max. amount of safe wireless channels 16

Channels

- Channel 1 2405 MHz

- Channel 2 2410 MHz

- Channel 3 2415 MHz

- Channel 4 2420 MHz

- Channel 5 2425 MHz

- Channel 6 2430 MHz

- Channel 7 2435 MHz

- Channel 8 2440 MHz

- Channel 9 2445 MHz

- Channel 11 2455 MHz

- Channel 10 2450 MHz

- Channel 12 2460 MHz

- Channel 13 2465 MHz

- Channel 14 2470 MHz

- Channel 15 2475 MHz

- Channel 16 2480 MHz

- amount of clamps 32

Supply voltage 10 - 30 V

Current consumption 110 mA with LED display

Conductor cross section

- single wire 0,08 ... 0,5 mm²

- fine wire 0,08 ... 0,5 mm²

- fine wired (wire sleeve without plastic collar) 0,25 mm²

stripping length 5-6 mm

configurable In-/ Outputs

14 semiconductor In-/ Outputs with help of software configurable

□

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

Amount of safe inputs	max. 14
Amount of safe semi-conductors OSSD outputs	max. 14
Amount of semi-conductors auxilliary outputs	max. 14
Amount of semi-conductors clock outputs	max. 8
Input current	HIGH 2,4 mA ... 3,8 mA LOW -2,5 mA ... 2,1 mA
Output type	PNP- Semiconductor
Output voltage	Operation voltage UB -0,5 V
Seperate output current	max. 600 mA (bei UB 24 V)
Total output current	max. 2 A (bei UB 24 V)
Button position 1	
Type designation	E2
Function type	Emergency- Stop- Button
Switch type	2 Openers + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	50.000 switching cycles
electrical lifespan	50.000 switching cycles
B10d- Value	250.000
Button position 2	
Type designation	I1
Function type	Illuminated Button
Switch type	1 closing device + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	30.000 switching cycles
electrical lifespan	30.000 switching cycles
Button position 3	
Type designation	I1
Function type	Illuminated Button



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Colour	red, yellow, green, blue, white
Switch type	1 closing device + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	30.000 switching cycles
electrical lifespan	30.000 switching cycles

Button position 4

Type designation	I1
Function type	Illuminated Button
Colour	red, yellow, green, blue, white
Switch type	1 closing device + LED
Bounce time NO	<10 ms
Bounce time NC	<10 ms
Break contact force opening	according to EN60947-5-1 Anh-K
Illumination	LED
mechanical lifespan	30.000 switching cycles
electrical lifespan	30.000 switching cycles

General data

Memory card	Installation of a memory card MEM-SP-N-88-001-93 possible
Programming connection	micro USB
Type terminal connection	clamp terminal
- fine wired (wire sleeve with plastic collar)	0,08 ... 0,5 mm ²
Input voltage	HIGH 75% from UB (adjustable by software) LOW 25% from UB (adjustable by software)

Technical data inputs

Short-circuit proof	Yes
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Mechanical data

Installation opening of buttons	22,5 mm
Type of housing	H0A

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S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

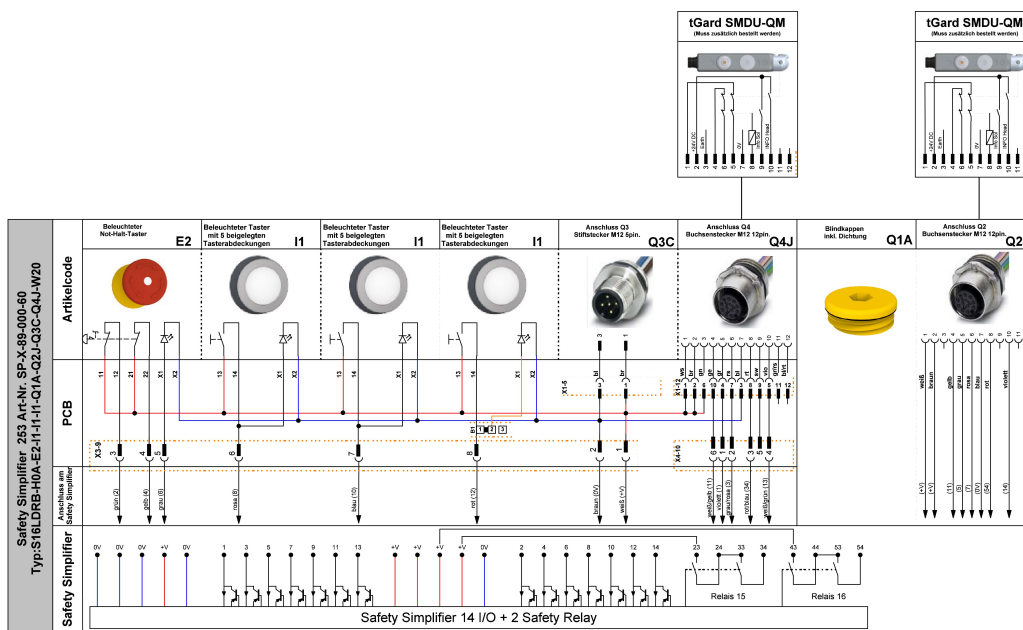
Dimensions

Height	44 mm
Length	253 mm
Width	42 mm

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

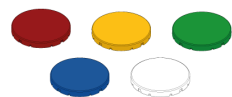
Electrical drawings

Connection example 1

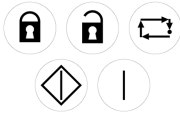
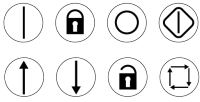


Equipment

Wireless Safety

Article code ZTK5	Button cap set for illuminated buttons	SP-X-88-001-19	
	Inscription label set ZB1	SP-X-88-001-21	
	Inscription label set ZB2	SP-X-88-001-22	

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	Inscription label set ZB3	SP-X-88-001-23	
	Inscription label set ZB4	SP-X-88-001-93	
Article code ZMT	Installation wrench	SP-X-88-001-25	
Article code ZUK	Liftingtool for button and light caps	SP-X-88-001-26	
Article code ZMB	Mounting plate big	SP-N-88-850-02	
Article code ZMS	Mountingplate small	SP-N-88-850-01	
Article code ZSD	Screw with seal	SP-X-88-001-89	

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

External antenna for Safety Simplifier, cable length

1 m

Simplifier EXTA 1 m

SP-X-88-200-24



External antenna for Safety Simplifier, cable length

10 m

Simplifier EXTA 10 m

SP-X-88-200-20



External antenna for Safety Simplifier, cable length

2 m

Simplifier EXTA 2 m

SP-X-88-200-23



External antenna for Safety Simplifier, cable length

5 m

Simplifier EXTA 5 m

SP-X-88-200-22



External antenna for Safety Simplifier, cable length

8 m

Simplifier EXTA 8 m

SP-X-88-200-21



Free software for the Safety Simplifier System

Simplifier Manager



Simplifier Monitor SRM

SP-N-88-850-03



Fastening set for Safety Simplifier for back panel

mounting

Simplifier ZHMS

SP-X-88-001-91



S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

Fastening set for Safety Simplifier

Simplifier ZHS

SP-X-88-001-91



Accessories

M12-female connector, 12 pin, 10 m

M12-C12101-G

SP-X-33-000-21



M12-female connector, 12 pin, 20 m

M12-C12201-G

SP-X-33-000-22



M12-female connector, 5-pin

M12-C51-G

SP-X-33-001-00



M12-male connector, 5 pin

M12-C52-G

SP-X-33-001-01



M12-female connector, 8 pin

M12-C81-G

SP-X-33-001-02



M12-male connector, 8 pin

M12-C82-G

SP-X-33-001-03



M12-connecting cable, 12 pin, 1 m

M12-M12-C1213-G

SP-X-33-000-30



S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

M12-connecting cable, 5 pin, 0,5 m	M12-M12-C5023-G	SP-X-33-000-10	
M12-connecting cable, 5 pin, 1 m	M12-M12-C513-G	SP-X-33-000-11	
M12-connecting cable, 5 pin, 2 m	M12-M12-C523-G	SP-X-33-000-12	
M12-connecting cable, 8 pin, 10 m	M12-M12-C8103-G	SP-X-33-000-09	
M12-connecting cable, 8 pin, 1 m	M12-M12-C813-G	SP-X-33-000-25	
Operating elements			
Universal hook	SP UH-K		
Safety switches			
Safety switch with locking function	THM-SMDU-QM	ITM-00159181	

S16LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2J0-Q3C0-Q4J0-W20

Downloads

- Certificates
- STEP
- Operating manual
- EPLAN-Data