

Safety laser scanners
S3000 PROFINET IO Professional, Sensor head
with I/O module

S30A-4111DL



SICK
Sensor Intelligence.

Model Name > [S30A-4111DL](#)
Part No. > [1052592](#)



At a glance

- Direct integration in PROFINET IO safe bus system
- 4 m protective field range
- Eight switchable field sets (eight protective fields, eight warning fields)
- Managed 2-port switch for fiber-optic connector
- Configuration memory integrated in the system plug
- Configurable system plug in I/O module
- Remote diagnostics and configuration through safety controller
- Simultaneous monitoring of two protective fields

Your benefits

- Reliable, fault-tolerant communication with PLC controller using state-of-the-art fiber-optic technology.
- Efficient, cost-effective protection - networked through direct connection to PROFINET IO networks
- Rapid diagnosis by means of remote access prevents downtimes
- Standardized integration in PLC controllers, thanks to GSDML generic station description
- Largest protective field range in the market increases the variety of application possibilities
- Quick recommissioning via configuration memory
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Decades of proven safety technology guarantee maximum reliability and availability - even under difficult conditions



Applications

Hazardous area protection (vertical):	✓
Access protection (vertical):	✓
Hazardous area protection (horizontal):	✓

Functions

Number of simultaneously monitored protective fields:	2
Static protective field switching:	-
Incremental encoder inputs:	-
External device monitoring (EDM):	-

Integrated configuration memory:	✓
Expanded measured data output (CMS, RS-422):	-
Measured data output (RS-422):	-
Safe device communication via EFI/SDL:	-

Technical data

Laser class:	1 (21 CFR 1040.10 and 1040.11, DIN EN 60825:2001)
Enclosure rating:	IP 65 (EN 60529)
Protection class:	III (EN 50178)
Type:	Type 3 (IEC/EN 61496-3)
Safety integrity level:	SIL2 (IEC 61508), SILCL2 (EN 62061)
Category:	Category 3 (EN ISO 13849)
Performance level:	PL d (EN ISO 13849)
PFHd:	8.0 * 1E-08 (EN ISO 13849)
TM (mission time):	20 a (EN ISO 13849)
Ambient operating temperature:	-10 °C ... 50 °C
Dimensions (W x H x D):	155 mm x 185 mm x 160 mm
Weight:	3.3 kg
Scan angle:	190 °
Protective field range:	4 m
Maximum warning field range:	49 m
Number of field sets:	8 ¹⁾
Number of monitoring cases:	16
Response time:	60 ms ²⁾
Resolution:	30 mm, 40 mm, 50 mm, 70 mm, 150 mm, selectable
Distance measuring range:	49 m
Number of multiple samplings:	Configurable via CDS 2 ... 16
Electrical connection:	Optical fiber conductor (2 sockets for SCRJ push-pull plug), plug-in supply connector with screw type terminal and cable gland for cable diameter 5 mm ... 10 mm
Supply voltage:	16.8 V DC, 24 V DC, 28.8 V DC
Configuration and diagnostics interface:	RS-232
Device properties:	PROFINET IO device with 2-port real-time switch according to PROFINET specification V2.2 PROFIsafe profile with 6-octet input and 6-octet output according to IEC 61784-3-3 V2.4 Cycle time 4, 8, 16, 32 ms, etc. GSDML according to GSDML specification V2.25
Switch properties:	Filtering Data Base according to IEEE 802.1D 6 prioritization levels for IEEE 802.1Q - Network prioritization 64 KB SRAM memory for caching telegrams, managed in 768-byte segments Resource prioritization for network control and RTC2/3 frames Telegram extension based on "Cut-through" Port status (Disabled, Blocking, Forwarding) Support for non-real-time and real-time data transfer
Port properties:	Auto-negotiation Auto-crossover (MDIX) Auto-polarity 100Base-FX
Conformance:	Conformance Class B
Topology support:	SNMP, MIB-2, LLDP nach IEEE 802.1AB MRP client support

Diagnostics:

Application-related manufacturer-specific channel diagnostics and channel diagnostics for the PROFI-safe profile, individually switchable
Report system errors
Maintenance alerts for POF interfaces for signal quality
Cable diagnostics
Neighborhood alerts
Support for port statistics
I&M support from I&M0 to I&M4

Interfaces for configuration and diagnostics using CDS:

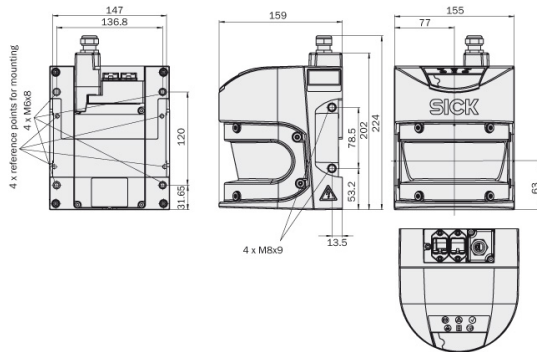
TCP port 9000 and UDP port 30718
RS-232

Functions that are not supported:

Multicast communication
Supervisor AR
MAC-pause mechanism in full duplex
Back-pressure in half duplex
Static learning
Broadcast Storm Control

1) One field set = one protective field and two warning fields 2) Depending on basic response time and multiple sampling

Dimensional drawing



Australia

Phone +61 3 9457 0600
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com