



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

S30A-4111CL



Model Name > [S30A-4111CL](#)
Part No. > [1052591](#)



At a glance

- Direct integration in PROFINET IO safe bus system
- 4 m protective field range
- Four switchable field sets (four protective fields, four 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:	4 ¹⁾
Number of monitoring cases:	4
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:

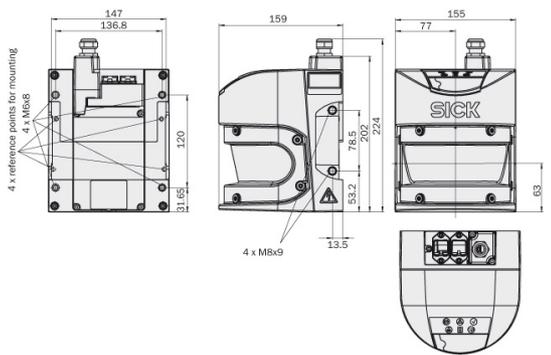
TCP port 9000 and UDP port 30718
RS-232

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



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