



S30A-xxxxDP

S3000 PROFINET IO Professional

SAFETY LASER SCANNERS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
S30A-xxxxDP	2047169

Other models and accessories → www.sick.com/S3000_PROFINET_IO_Professional

Detailed technical data

Features

Model	I/O module
Application	Indoor
Number of simultaneously monitored protective fields	2
Angular resolution	Depending on range and resolution
Response time	60 ms ¹⁾

¹⁾ Depending on basic response time and multiple sampling.

Safety-related parameters

Type	Type 3 (IEC 61496)
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)	8.0×10^{-8}
T_M (mission time)	20 years (EN ISO 13849)

Functions

Integrated configuration memory	✓
Measured data output	Via RS-422

Interfaces

Connection type	
Supply connection	System plug with or without connecting cable
Configuration and diagnostics interface	RS-232, RS-232
Transmission rate	9.6 kBaud, 19.2 kBaud, 38.4 kBaud
Fieldbus, industrial network	PROFINET PROFI-safe
Type of fieldbus integration	Integrated in the device
Device properties	PROFINET IO module with 2-port real-time switch according to PROFINET specification V2.2
	PROFI-safe 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

Functions that are not supported	Port properties	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
	Conformance	Auto-negotiation
		Auto-crossover (MDIX)
		Auto-polarity
		100Base-TX
	Topology support	SNMP, MIB-2, LLDP according to IEEE 802.1AB
	Diagnostics	MRP client support
		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
	Interfaces	Cable diagnostics
		Neighborhood alerts
		Support for port statistics
		I&M support from I&M0 to I&M4
	Functions that are not supported	TCP port 9000 and UDP port 30718
		RS-232
		Multicast communication
		Supervisor AR
	Functions that are not supported	MAC-pause mechanism in full duplex
		Back-pressure in half duplex
		Static learning
		Broadcast Storm Control

Electronics

Protection class	III (VDE 0106, EN 60950)
Supply voltage V_s	24 V DC (16.8 V DC ... 28.8 V DC)
Power consumption	0.8 A ¹⁾ 2.3 A ²⁾

¹⁾ At 24 V DC without output load.

²⁾ At 24 V DC including maximum output load.

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)

<div>Shock resistance</div>		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

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

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:

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