S30A-xxxxCP

S3000 PROFINET IO Advanced

SAFETY LASER SCANNERS

SICK
Sensor Intelligence.

S30A-xxxxCP | S3000 PROFINET IO Advanced

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Ordering information

Type	Part no.
S30A-xxxxCP	2047737

Other models and accessories ➔ www.sick.com/S3000_PROFINET_IO_Advanced

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

Contour as a reference	✓
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 PROFIsafe

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 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-TX
Conformance	Conformance Class B
Topology support	SNMP, MIB-2, LLDP according to IEEE 802.1AB MRP client support
Diagnostics	Application-related manufacturer-specific channel diagnostics and channel diagnostics for the PROFIsafe 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	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

Electrical data

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)

[1) At 24 V DC without 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)
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/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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