

Enhanced Laser Sentinel EVO

958000013

SLS-M5-PP-BO
BOTTOM CONNECTED

OVERVIEW

Safety laser scanner based on Time of Flight measurement with command integration in Profinet/Profisafe fieldbus.

- More than 72 m2 safely monitored, with 5.5 m over 275°
- Dimensions (w,d,h): 102 , 112.5, 152 mm
- Easy programming and fieldbus emulation with intuitive Graphic User Interface
- Dynamic reference points • Advanced dust filtering
- Local I/O connection with standard M12 cables
- Up to 8 simultaenous safety zones
- Up to 7 Simultaneous warning zones
- Up to 70 zone sets
- 30/40/50/70/150 mm selectable detection capability
- Metal brackets allowing full orientation and fast replacement
- Advanced measurement data protocol
- Colour graphic display for monitoring and diagnost

TECHNICAL FEATURES

Features and performances

Detection capability	30/40/50/70/150 mm selectable
Angular resolution	0,1°
Safety range (min)	0,05 m
Safety range (max) [detection capability]	2,5m[30mm]; 3m[40mm]; 4m[50mm]; 5,5m[70,150mm]
warning range (max)	40 m
Detectable target remission	1,8% .. ""1000%""
N°of simultaneous safety zone (max)	8
N°of simultaneous warning zone (max)	7
N°of zone set (max)	70
N°of reference point set (max)	70
Response time max	94 ms - 1750 ms (Fast Mode), 105 ms - 2065 ms (Standard Mode)
Tolerance Zone	100 mm
Supplement for retroreflectors on scan plane in front of a safety zone	200 mm

Safety parameters

Type	3 (EN 61496-1)
SIL	SIL 2 (IEC 61508) SIL 2 (EN 62061)
Cat.	(EN ISO 13849-1)
PFHd	2.24 x 10-8

MTTFd	61 years
TM (Mission Time)	20 years (EN ISO 13849-1)

Electrical data

Power Supply	16.8 Vdc ... 28.8 Vdc
Power consumption	8.5 W @24 V, no digital I/O connected
Protection class	III (EN/IEC 61140)

Mechanical data

Dimensions	102x113x152 mm
Material	Aluminium / PBT
Housing material	Painted alumininium / PC
Optic window material	PMMA

Power connector's configurable input/output

N° of configurable input (max)	5
N° of configurable output (max)	4

Communication

Network Interfaces	10/100 Mbit/s Ethernet (3X)
PROFINET specification	V2.43
PROFIsafe specification	V2.6.1 & 2.4 (w/o iPar) / Conformance class B

GSDML specification	V2.43

Connectors

Power and I/0	M12 male type A connector - 8 poles
Ethernet to GUI / Data transmission	M12 male type D connector - 4 poles
Profinet / Profisafe	M12 male type D connector - 4 poles (2X)

HMI/UI

Configuration and monitoring interfaces	DL Sentinel 4.0.x
LED indicators	safe/normal operation - Profinet

Environmental data

Humidity	95% max non-condensing
Enclosure	IP65
Operating Temperature	-10 ... 50 °C
Storage temperature	-20 ... 70 °C
Vibration Resistance	According to IEC 61496-1 (4.3.3.1;4.3.3.2;5.4.4.1) Class 3M7 (Stationary Use) Class 5M1 (Ground vehicle Installation)
Shock Resistance	According to IEC 61496-1 (4.3.3.1;4.3.3.3;5.4.4.2) IEC 61496-3 (5.4.4); IEC 60068-2-75 Class 3M7 (Stationary Use) Class 5M1 (Ground vehicle Installation)

Optical Data

Laser Wavelength	905 nm
Laser Pulse duration	3 ns

Laser class/Laserklass	CLASS 1 (EN 60825-1:2014)

Functions

Generic Alarm	Available
Clean Window Alarm	Available
Muting enable	Not Available
Muting	Available
Override	Available
Dust Filtering	Available
EDM (External Device Monitoring)	Not Available
Partial Muting	Available
Pre-alarm (warning)	Available
Advanced Data transfer protocol	Available
Reset(restart cycle)	Available
Manual/automatic restart	Available
Shut-off (mute)	Available
Dynamic Reference Points	Available
Encoder input	Not Available

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