



# Enhanced Laser Sentinel

958001120

SLS-R5-E

LASER SENTINEL™ ENHANCED

## OVERVIEW

- Safety laser scanner based on Time Of Flight measurement
- More than 72 m<sup>2</sup> safely monitored, with 5.5 m over 275°
- High detection performances in compact size
- Advanced dust filtering
- Easy programming with intuitive Graphic User Interface
- Dimensions (w,d,h): 102 , 112.5, 152 mm
- I/O connection with standard M12 cables
- Up to 3 simultaneous safety zones
- 2 Warning zones up to 40 m
- 30/40/50/70/150 mm selectable detection capability
- Up to 70 zone sets
- Partial dynamic muting
- Metal brackets allowing full orientation and fast replacement
- Advanced measurement data protocol
- Colour graphic display for monitoring and diagnostics
- Speed measurement with encoder in

## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	≤5.5 m
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controlled height	5.5 m
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Sensitivity adjustment	GUI
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Muting enable	N/A
Scan angle	275°
Warning zone max range	40m@target bianco (90%)
Detection capability	30/40/50/70/150 mm selezionabile
With 1 safety zone	N/A
With 1 safety zone + 1 warning zone	N/A
With 1 safety zone + 2 warning zones	N/A
With 2 safety zone	N/A
With 2 safety zone + 1 warning zone	N/A
With 2 safety zone + 2 warning zones	N/A
With 3 safety zone	N/A
Max zone sets number in a particular activation order	N/A
Safety area range with detection capability =30 mm	0.05 ... 2.5m
Safety area range with detection capability =40 mm	0.05 ... 3m
Safety area range with detection capability =50 mm	0.05 ... 4m
Safety area range with detection capability =70 mm	0.05 ... 5.5m

Safety area range with detection capability =150 mm	0.05 ... 5.5m
Partial muting, dynamic for first OSSDs couple	N/A
Total Muting (monodirectional or bidirectional)	N/A
Override	N/A
Reference points	disponibile
Measurement data max. angular resolution	0,5°
Angular resolution	0,1°
Response time ( Master + 3 slaves )	N/A
Tolerance zone	100 mm
Operative temperature range	-10 ...+50 °C

### Application

Description	Compact scan view 275°
Functions	remote slave unit enhanced
Wait time for next zone switching	N/A
Wait time for next zone switching	N/A
Configuration and monitoring interface	DL Sentinel

### Safety parameters

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Type	3 (EN 61496-1)
SIL	SIL 2 (IEC 61508)
SILCL	SILCL 2 (EN 62061)
PL	PL d (EN ISO 13849-1)
PFHd	6,38 x 10-8
Cat.	3 (EN ISO 13849-1)
Mission time according ( EN ISO 13849 )	20 anni

#### Outputs

Output type	n/a
Response time	Trisp. master + 10msec
Response Time (Master + Slave)	N/A
Response Time (Master + 2 Slave)	N/A
Generic alarm	disponibile
Window cleaning alarm	disponibile
Safety output ( OSSDs) max number	N/A
Measurement data	disponibili
EDM ( external device monitoring )	N/A
Highspeed input	N/A

Muting lamp	N/A
Configurable Inputs/Outputs total number	N/A
Configurable Inputs max number	N/A
Configurable Inputs/Output max number	N/A
Configurable Output max number	N/A
Configurable OSSDs max number	N/A
Safety zone max number	come SLS-Mx-
Warning	disponibile
Advanced data transmission protocol	disponibile
Reset ( power cycle)	N/A
Manual/automatic restart	N/A
Shut off	N/A

#### Electrical data

Operating Voltage	N/A
Max ripple content	N/A
LED indicators	OSSD / Warning / Interlock
Max output current	N/A
Emission	Laser Red

Zero-voltage switching	N/A
Optical power class	1 (EN 60825-1:2014 )
Maximum capacitance load	2,2uF @24 Vdc
Output voltage	N/A
Cabel Length (Power Supply/Output)	N/A
Ripple	N/A
Power Consumption	8W@24v singolo dispositivo, a vuoto
Input capacitive load	22uF
Input current	N/A
Input saturation voltage	N/A

#### Mechanical data

Dimensions	102x113x152
Weight	1,5 kg
Housing Material	Alluminio verniciato / PC
Connections	N/A
Storage temperature	-20 ... 70°C
Material	Metal - Aluminium / PMMA
Plug	N/A

max rotation speed	1980 rpm
Optic cover material	PMMA
Mechanical protection	IP 65 (EN 60529)
Humidity	15 ... 95 % (no condensazione)

#### Test/Approvals

Approvals	CE
EMC compatibility	IEC 61496 -1 / 3

#### Generical Data

System Memory	N/A
Storage	-20 ... 70°C
Network Interface	N/A
Dimensions	102x113x152
Operating Temperature	-10°C ... +50°C
Mechanical Protection	IP 65 (EN 60529)
Certifications (Safety Compliance)	TUV / UL
Power supply	24Vdc +/- 20%

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