LASER SENTINEL™

DATALOGIC

Safety laser scanner based on Time Of Flight measurement
More than 72 m2 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 8 pins female M12 cable
2 Warning zones up to 40 m
40 / 70 mm detection capability
Up to 10 zone sets
Metal brackets allowing full orientation
Auto/Manual restart
Total muting function
Colour graphic display for monitoring and diagnostics

APPLICATIONS

- Robot cells (pick and place, inspection, testing, welding, etc)
- Palletizers / depalletizers
- Open machinery, process lines
- Automated Guided Vehicles (AGV)
- Automated Guided Carts (AGC)
- Mobile Industrial Robots

INDUSTRIES

- Automotive
- Material handling
- Secondary Packaging
- Food
- Wood
- Ceramics

	FINGER	HAND	ARM	BODY
Type 3			x	x

SLS SA - 5 - 08

MODEL	
B	Basic, 3 zone sets
SA	Standalone, 6 zone sets
M	Master, 10 zone sets
R	Slave (or Remote)

MAX SAFETY RANGE	
5	5.5 m (70 mm detection capability)

I/O CONNECTORS	
08	M12 8-pin male
0812	M12 8-pin male OR M12 12-pin male

TECHNICAL DATA

	SLS-B5	SLS-SA5-08	SLS-M5-0812		SLS-R5
GENERAL DATA					
Type (EN61496-1)	3				
PL (EN ISO 13849-1)	d				
SIL (IEC 61508)	2				
DETECTION DATA					
Detection capability	70 mm	40 / 70 mm selectable			
Angular resolution	0.1°				
Safety zone operating range	0.05 ... 5.5 m				
Warning zone max operating range	0.05 ... 40 m with remission of target = 90% (white)				
Max. number of symultaneous warning zones	1	2			
Max. opening angle	275°				
Tolerance zone	150 mm	100 mm			
ELECTRICAL DATA					
Power supply (Vdd)	24 Vdc ± 20%				
Output current	0.25 A max / each OSSD				N/A
Output Capacitive load	2.2 uF @ 24Vdc max				N/A
Input Load current	6 ... 15 mA				N/A
Input saturation voltage	> 15 V				N/A
Input Capacitive Load	22 uF				N/A
MECHANICAL AND ENVIRONMENTAL DATA					
Operating temperature	0 ...+50 °C				
Storage temperature	-20 ... 70°C				
Humidity	15 ... 95 % (no condensation)				
Mechanical protection	IP 65 (EN 60529)				
INPUTS / OUTPUTS CONFIGURATION					
Connector used	M12 8 pin	M12 8 pin	M12 8 pin	M12 12 pin	N/A
Safety Outputs (OSSDs)	1 x 2	1 x 2	1 x 2	1 x 2	N/A
Standard Inputs	2	0	2	1	N/A
Standard Inputs/Standard Outputs (configurable)	1	3	1	4	N/A
CONFIGURABLE PARAMETERS					
Response time					
for main unit	Min: 62 ms; Max: 482 ms				
for any additional slave unit	10 ms				
Max. Zone sets number in any activation order (*1):					
with 1 safety zone	3	3	3	10	N/A
with 1 safety zone + 1 warning zone	2	2	2	6	
with 1 safety zone + 2 warning zone	N/A	N/A	N/A	3	
Max. Zone sets number in a particular activation order (*2):	N/A	6	N/A	N/A	
Zone set input switching time	Min: 30 ms; Max: 5000 ms				
FUNCTIONS					
Manual / automatic restart	Yes				N/A
Reset (power cycle)	Yes				
Total Muting (monodirectional or bidirectional)	No	Yes			
Reference Points	No	Yes			
Override	No	Yes (*3)	Yes		N/A
Muting Lamp	No	Yes			N/A
Muting Enable	No	Yes (*3)	Yes		N/A
Clean Window Alarm	No	No	Yes		
Generic Fault Alarm	No	Yes	Yes		
Measurement data	No	Yes (*4)	Yes (*5)		
Measurement data angolar resolution	No	0.1°			0.5°
APPLICATIONS					
Horizontal static	Yes				
Vertical static	No	Yes			
Moving (simple AGVs)	No	Yes			
Moving (medium complexity AGVs)	No	No	Yes		

NOTES

(*1) The max number of zone sets switching is reached when all available inputs are used for zone set switching

(*2) With 1 safety zone only, up to 3 zone sets are available in any activation order. Up to 6 are available only using some allowed activation order. Refer to Manual and GUI for details.

(*3) Ovverride Input, Muting Enable input and Muting Lamp output on SLS-SAx are mutually exclusive

(*4) Using the programming connector on the front of the device

(*5) Using the rotating connector in the back of the device

MODEL SELECTION AND ORDER INFORMATION

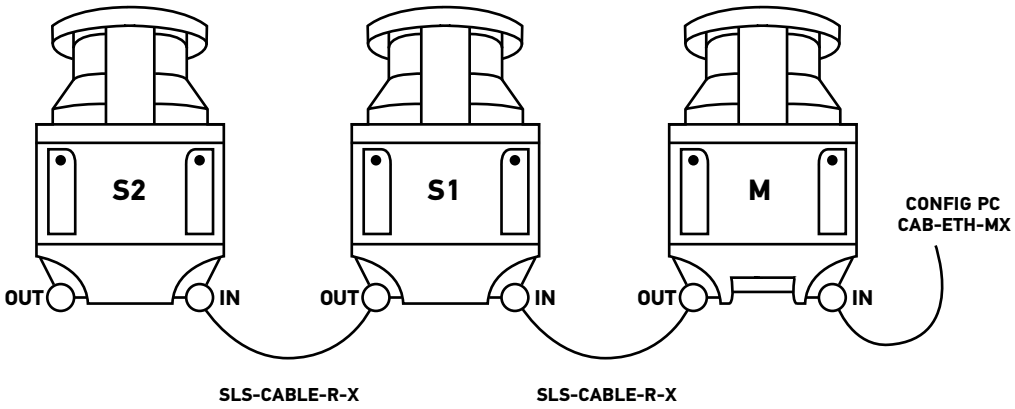
MODEL	PRODUCT DESCRIPTION	ORDER NO.	
BASE	SLS-B5	Base 5.5m 3 zone sets	958001100
STANDALONE	SLS-SA5-08	Standalone 5.5m 6 zone sets	958001090
MASTER/SLAVE	SLS-M5-08012	Master 5.5m 10 zone sets	958001040
	SLS-R5	Remote 5.5m	958001070

CABLES

	MODEL	POLES	LENGHT	CODE
MAIN CABLES	CS-A1-06-U-03	8	3 m	95ASE1220
	CS-A1-06-U-05		5 m	95ASE1230
	CS-A1-06-U-10		10 m	95ASE1240
	CS-A1-06-U-15		15 m	95ASE1250
	CS-A1-06-U-25		25 m	95ASE1260
	CS-A1-10-U-03	12	3 m	95A252720
	CS-A1-10-U-05		5 m	95A252730
	CS-A1-10-U-10		10 m	95A252740
	CS-A1-10-U-15		15 m	95A252750
	CS-A1-10-U-25		25 m	95A252760
ETHERNET TO HOST CABLES	CAB-ETH-M01 M12-IP67 ETHERNET CAB. (1M)	4	1 m	93A051346
	CAB-ETH-M03 M12-IP67 ETHERNET CAB. (3M)		3 m	93A051347
	CAB-ETH-M05 M12-IP67 ETHERNET CAB. (5M)		5 m	93A051348
	CAB-ETH-M10 M12-IP67 ETHERNET CAB. (10M)		10 m	93A051391
CABLES TO REMOTE	SLS-CABLE-R-5	8	5 m	95ASE2890
	SLS-CABLE-R-10		10 m	95ASE2900
	SLS-CABLE-R-20		20 m	95ASE2910

NOTES

ETHERNET TO HOST CABLES are used for programming and monitoring the device with DL Sentinel, and for reading the measurement data.
CABLES TO REMOTE are used to connect the Master models to the Slaves like in the following picture



ACCESSORIES

	SLS-B5 / SLS-SAx	ORDER NUMBER
	BRACKETS	
Complete bracket system	SLS-BRACKET-A	95ASE2920
Pitch regulation bracket system	SLS-BRACKET-B	95ASE2930
Head protective bracket	SLS-BRACKET-C	95ASE2940
	SAFETY UNITS	
Safety Unit	SE-SR2	95ACC6170
	OTHERS	
Liquid cleaner in spray bottle (1 lt)	SLS-CLEANER	95ASE2990
Cleaning cloth (22 cm x 22 cm), 100 pcs.	SLS-CLOTH	95ASE3000