
Options & Accessories

- On-board processor for application software
- Heat shield and air purge system
- +24 VDC power supply unit
- Smart sensor software inside technology for OEMs

High Frequency, Large Standoff
Advanced Signal Filtering and Built for Hostile Environments

- Longest range sensor in the Selcom family
- High Speed PSD-based triangulation principle
- Sophisticated fast automatic light control for varying surfaces
- Built-in processor for data averaging and filtering allows for a variety of data and analog outputs
- Fast sampling rate of 16kHz provides information other sensors might miss
- Stand off up to 1250mm
- Rugged industrial packaging
- Internal processor for application software
- Ideal for general purpose applications

Technical Specification

Model Number	Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case) <small>Note 1</small>	Resolution (Typical) <small>Note 2</small>	Linearity	Triangulation Angle at SO	Spot Size at SO
SLS 6050/400	mm 50	400	375	0.013	0.0013	0.03	32 deg.	0.5
	in. 2	16	15	0.0005	0.00005	0.001		0.02
SLS 6362/480	mm 362	480	299	0.091	0.0091	0.181	28 deg.	0.6
	in. 14	19	11.8	0.0036	0.00036	0.0071		0.02
SLS 6100/500	mm 100	500	450	0.025	0.0025	0.05	28 deg.	0.6
	in. 4	20	18	0.001	0.00010	0.002		0.02
SLS 6175/500	mm 175	500	413	0.044	0.0044	0.088	28 deg.	0.6
	in. 7	20	16.2	0.0017	0.00017	0.0034		0.02
SLS 6250/500	mm 250	500	375	0.063	0.0063	0.13	28 deg.	0.6
	in. 10	20	14.8	0.0025	0.00025	0.0049		0.02
SLS 6362/500	mm 362	500	319	0.091	0.0091	0.18	28 deg.	0.6
	in. 14	20	12.6	0.0036	0.00036	0.0071		0.02
SLS 6510/600	mm 510	600	345	0.128	0.0128	0.26	23 deg.	0.7
	in. 20	24	13.6	0.005	0.0005	0.01		0.03
SLS 6180/738	mm 180	738	648	0.045	0.0045	0.09	19 deg.	0.7
	in. 7	29	25.5	0.0018	0.00018	0.0035		0.03
SLS 6225/750	mm 225	750	638	0.056	0.0056	0.11	19 deg.	0.7
	in. 9	30	25.1	0.0022	0.00022	0.0044		0.03
SLS 6375/750	mm 375	750	563	0.094	0.0094	0.19	19 deg.	0.7
	in. 15	30	22.1	0.0037	0.00037	0.0074		0.03
SLS 6525/750	mm 525	750	488	0.13	0.013	0.26	19 deg.	0.8
	in. 21	30	19.2	0.0052	0.00052	0.010		0.03
SLS 6375/1000	mm 375	1000	813	0.09	0.009	0.19	14 deg.	1.0
	in. 15	39	32.0	0.0037	0.00037	0.007		0.04
SLS 6575/1000	mm 575	1000	713	0.144	0.014	0.29	14 deg.	1.0
	in. 23	39	28.1	0.0057	0.00057	0.011		0.04
SLS 6725/1000	mm 725	1000	638	0.181	0.018	0.36	14 deg.	1.0
	in. 29	39	25.1	0.007	0.0007	0.014		0.04
SLS 6300/1250	mm 300	1250	1100	0.075	0.0075	0.15	12 deg.	1.2
	in. 12	49	43.3	0.003	0.0003	0.006		0.05
SLS 6550/1250	mm 550	1250	975	0.14	0.014	0.28	12 deg.	1.2
	in. 22	49	38.4	0.0054	0.00054	0.011		0.05
SLS 6850/1250	mm 850	1250	825	0.213	0.021	0.43	12 deg.	1.2
	in. 33	49	32.5	0.0084	0.00084	0.017		0.05
SLS 61000/1250	mm 1000	1250	750	0.250	0.0250	0.50	12 deg.	1.2
	in. 39	49	29.5	0.010	0.0010	0.02		0.05
SLS 61100/1250	mm 1100	1250	700	0.28	0.028	0.55	12 deg.	1.2
	in. 43	49	27.6	0.011	0.0011	0.02		0.05

Note 1: Worst Case Resolution - at full bandwidth.

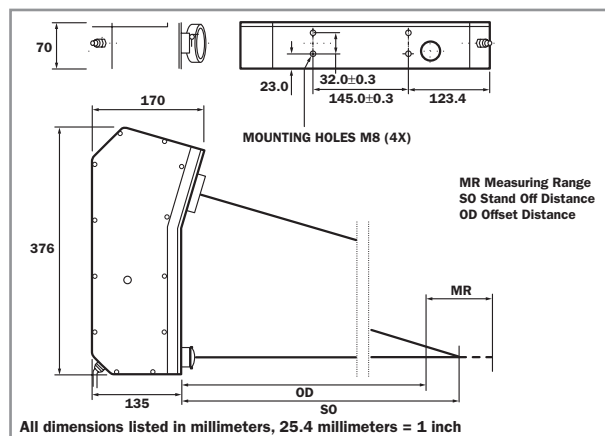
Note 2: Typical Resolution - at 128 sample averaging.

LASER SOURCE			ENVIRONMENTAL		
Laser Class	2, 3B, 3R (IEC)		Enclosure	IP-65 / NEMA 4	
	II, IIIa, IIIb (FDA)		Temperature - operating	°C	0-50
				°F	32-122
Wavelength	Visible Red, Near IR		Temp. Stability	% of MR / °C	0.01
Lifetime expectancy	hr	100,000	Relative humidity	%	<95 non-condensing
ELECTRICAL			PHYSICAL		
Power supply voltage	VDC	18 to 32	Dimensions	mm	376 x 169 x 70
Current draw	mA	<350		in.	14.8 x 6.65 x 2.76
In rush current	A	1 during 50ms	Weight	kg	4.4
Sampling rate	Hz	16,000		lbs.	9.7
Frequency response	Hz	2,000	Cable length	m	2
Detector type	PSD			ft.	6.6
OUTPUT INTERFACES					
Interface analog / digital	0-20mA	4-20mA	RS-232	RS-422	Selcom (Digital)
Data update rate	16 kHz	16 kHz	≤100 Hz	1-16 kHz	16 kHz
Max. cable length	m	100	15	100	100
	ft.	328	49	328	328

CONNECTION WIRING AND DIMENSIONS

DSUB 15-pin outputs / IP 65 connector

- 1 Receive Data, RS-232
- 3 Clock, Selcom or RS-422
- 4 Clock-inv, Selcom or RS-422
- 5 Data, Selcom or RS-422
- 6 Data-inv, Selcom or RS-422
- 8 Invalid out-
- 9 Transmit Data, RS-232
- 11 Ground
- 12 Invalid out+
- 13 Analog out (0-20mA, 4-20mA)
- 14 Laser ON (+18 to +32V)
- 15 Power (+18 to +32V)
- 2, 7, 10 NC


1- YEAR LIMITED WARRANTY

The company will replace or, at the company's option, repair any system or parts of a system which are found defective in material or workmanship within one year from the date of shipment. Our obligation with respect to such system or parts shall be limited to repair and replacement, F.O.B: our facilities, and in no event shall the company be liable for incidental, consequential or special damages, or for transportation, installation, adjustment or other expenses which may arise in connection with such system or parts. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including warranties of merchantability and fitness. No waiver, alteration, or modification of the foregoing warranty shall be valid unless made in writing and signed by an executive of the company.

LMI vision sensors are manufactured under one or more of the following U.S. patents: 4,305,661; 4,373,804; 4,375,921; 4,394,683; 4,576,482; 4,667,231; 4,875,776; 5,056,922; 5,114,230; 5,164,579; 5,362,970; 5,510,625; 5,670,787; 5,684,292; 5,691,545; 5,734,172; 5,811,827; 5,854,491; 5,877,491; 5,880,459; 5,940,302; 5,981,965. Other US and foreign patents pending.

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

www.sensorsthatsee.com


LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

MAX PULSE PEAK POWER: 1.0 mW
PULSE DURATION: 32 µs
EMITTED WAVELENGTH: 655 nm

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50 dated July 26, 2001.



LASER RADIATION
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT

MAX PULSE PEAK POWER: 20 mW
PULSE DURATION: 32 µs
EMITTED WAVELENGTH: 785 nm

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50 dated July 26, 2001.



LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT

MAX PULSE PEAK POWER: 5 mW
PULSE DURATION: 32 µs
EMITTED WAVELENGTH: 655 nm

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50 dated July 26, 2001.

