

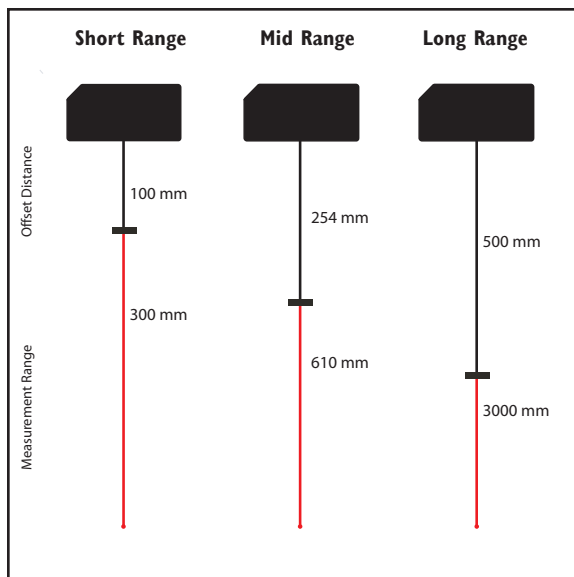
# Product Information

## DLS-2000A Digital Laser Sensor



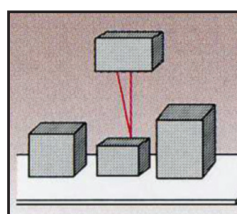
### An Affordable High Accuracy Laser Sensor with Long Range Capabilities

- CCD optical triangulation principle
- Set up utility software included
- Short and long range models available
  - Short Range** - up to 610 mm Measurement Range at 1.8 kHz sample rate; 0.025 mm digital resolution
  - Long Range** - up to 3,000 mm Measurement Range at 1.667 kHz sample rate; 0.01 mm digital resolution
- Accuracy of  $\pm 0.05\%$  of MR
- Digital RS-232 and RS-485 interface converter permits connection to most PCs and PLCs
- Analog outputs: 4-20 mA and 0-10 VDC field selectable
- Automatic power control compensates for color and surface conditions
- Well-suited for thickness measurement, profiling, positioning and other applications in most industries

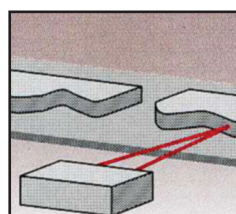


Model Number	Measurement Range (MR)	Offset Distance (OD)	Accuracy	Scan Rate	Digital Resolution	Analog Resolution
DLS-2000A 4-12	mm 300	100	$\pm 0.05\%$	1.8 kHz	0.025	0.075
	in. 11.8	4				
DLS-2000A 10-24	mm 610	254	$\pm 0.05\%$	1.8 kHz	0.051	0.152
	in. 24	10				
DLS-2000A LR (Long Range)	mm 3,000	500	$\pm 0.05\%$ to	1.667 kHz	.250	0.750
	in. 118	19.7	$\pm 0.1\%$ at end of range			

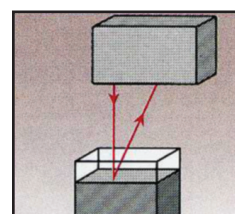
Note 1: Offset distance is the distance from the sensor to the beginning of the measurement range



Height Sorting



Contact Sorting



Micro Positioning

E-mail: [sales@flwpa.com](mailto:sales@flwpa.com) | [www.flwpa.com](http://www.flwpa.com)



# Technical Specifications

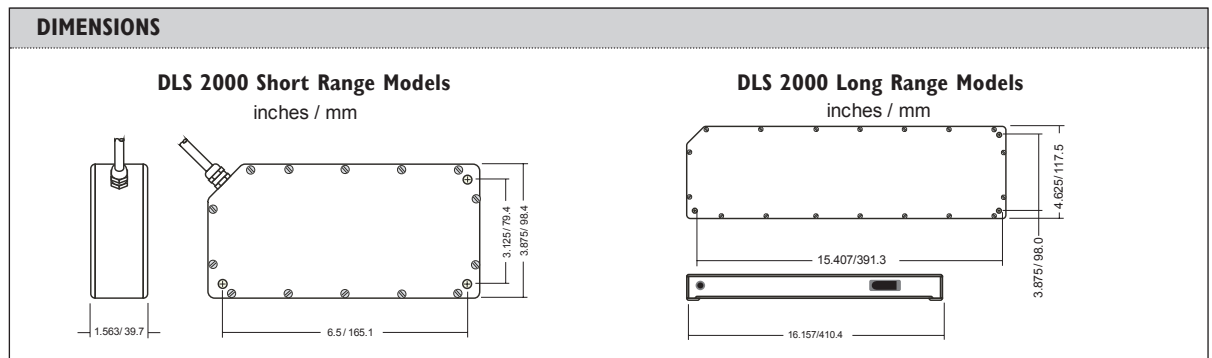
## DLS-2000A Digital Laser Sensor



LASER SOURCE		STANDARD	ENVIRONMENTAL		
Laser Type		InGaAlP	Enclosure	IP-65 / NEMA 4	
Laser Class		IIIb	Temperature	°C	0-45 operating
Laser Source Power	mW	50		°F	32-113
Wavelength	nm	670	Temp. Fluctuation	% of MR/°C	0.01
Lifetime expectancy	hr	100,000	Relative Humidity	%	<90 non-condensing

ELECTRICAL			PHYSICAL		
Power supply voltage	VDC	+15 to -30	Weight		
Current draw	mA	<250		Short Range	Long Range
Analog Output Signal	VDC	0 to +10	g	68l	2 kg
Frequency response	Hz	1800	lbs.	1.5	4
Detector Type		CCD	Connector: Turk BS 81121-0/PG-9, V2-02854		
Spot Size	mm	3.05 x 1.02	Cable: Supplied separately - RS12T		
	in.	0.012 x 0.04	Housing range: Anodized aluminum enclosure		

OUTPUT INTERFACES	
Digital	RS-485 @ 57.6 Kbaud
Analog	4-20 mA or 10 VDC
Max Analog	2000 ohms using voltage output
	550 ohms using current power



These products are covered under one or more of the following patents: United States, 4,305,661; 4,373,804; 4,375,921; 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; 5,854,491 Canada, 1,307,051; 1,116,750.

### 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.

Contact FLW of PA for LMI Technologies (USA), Inc. technical information and application support

FLW of PA, Inc. | 527 West Lancaster Ave. | Frazer, PA 19355 | Ph: (610) 251-9700 | Fax: (610) 640-4270

E-mail: [sales@flwpa.com](mailto:sales@flwpa.com)  
www.flwpa.com