



**High Frequency and Accuracy  
Affordable Triangulation Sensor**

- High speed PSD-based triangulation sensor family
- Fast automatic light control for varying surfaces
- Analog high speed output
- Optional current output
- Small laser spot size
- Rugged industrial packaging
- Standard continuous version for highest frequency response "-C"
- Optional modulated version for high ambient light applications "-M"
- Ideal for affordable applications

**Options & Accessories**

- High speed analog output to 100 kHz response
- Optional optical bandpass filter for continuous version for higher ambient light applications with highest frequency response
- Modulated version (3 kHz response)
- High speed modulated version (10 kHz response)
- Analog current out (0/4-20 mA) instead of voltage out

**Technical Specification**

Model Number	Measurement Range (MR)	Stand Off (SO)	Offset Distance (OD)	Resolution (Worst Case)	Resolution (Typical)	"-C" Version Linearity	"-M" Version Linearity	Triangulation Angle at SO	Spot Size at SO
LDS 80/10	mm 10 in. 0.39	80 3.15	75 2.95	Note 1 0.01 0.00039	Note 2 0.001 0.000039	0.05 0.02	0.02 0.0008	30 deg.	0.2 0.008
LDS 80/20	mm 20 in. 0.79	80 3.15	70 2.76	0.02 0.00079	0.002 0.000079	0.10 0.004	0.04 0.0016	30 deg.	0.2 0.008
LDS 80/30	mm 30 in. 1.18	80 3.15	65 2.56	0.03 0.0012	0.003 0.00012	0.15 0.006	0.06 0.0024	30 deg.	0.2 0.008
LDS 90/40	mm 40 in. 1.57	90 3.54	70 2.76	0.04 0.0016	0.004 0.00016	0.20 0.008	0.08 0.0031	26 deg.	0.25 0.010
LDS 90/45	mm 45 in. 1.77	90 3.54	67.5 2.66	0.045 0.0018	0.0045 0.00018	0.225 0.009	0.09 0.0035	26 deg.	0.25 0.010

Note 1: Resolution at full bandwidth.  
Note 2: Resolution at 128 sample averaging.



