

**NEW! LaserRanger™ LR1 Series – Optical Range Sensor**

The LR1 makes fast, accurate, non-contact range measurements. The LR1 is superior to conventional measurement methods in applications that are *dynamic, dangerous, delicate, or difficult*.

The LR1’s large measurement range, fast sampling rate and ease of use will solve measurement problems in a wide range of applications. The rugged package will survive in the most demanding industrial environments. The LR1 electronics and optics operate in all lighting conditions. All this performance and a *very* affordable price make non-contact measurement accessible to everyone. Please contact Aculux today for more information.



**FEATURES**

- 1,000 samples per second
- 3.2” – 8.2” measurement range
- Electronic ambient light rejection
- Automatic laser power control for varying surfaces
- LED for data and range status
- No controller needed – sensor interfaces directly to any analog data collection system
- Compact, rugged package with removable bezel for demanding applications

<p><b>Dynamic</b></p> <p>Vibrating, moving, wobbling, deflection, deformation, oscillations</p>	<p><b>Delicate</b></p> <p>Applied adhesives, wet paint, optics, organic material</p>	<p><b>Dangerous</b></p> <p>Cutting tools, high current, high pressure, poisonous gas environments</p>	<p><b>Difficult</b></p> <p>Probing grooves, small features, real time sheet thickness</p>
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**NEED A CUSTOM SOLUTION?**

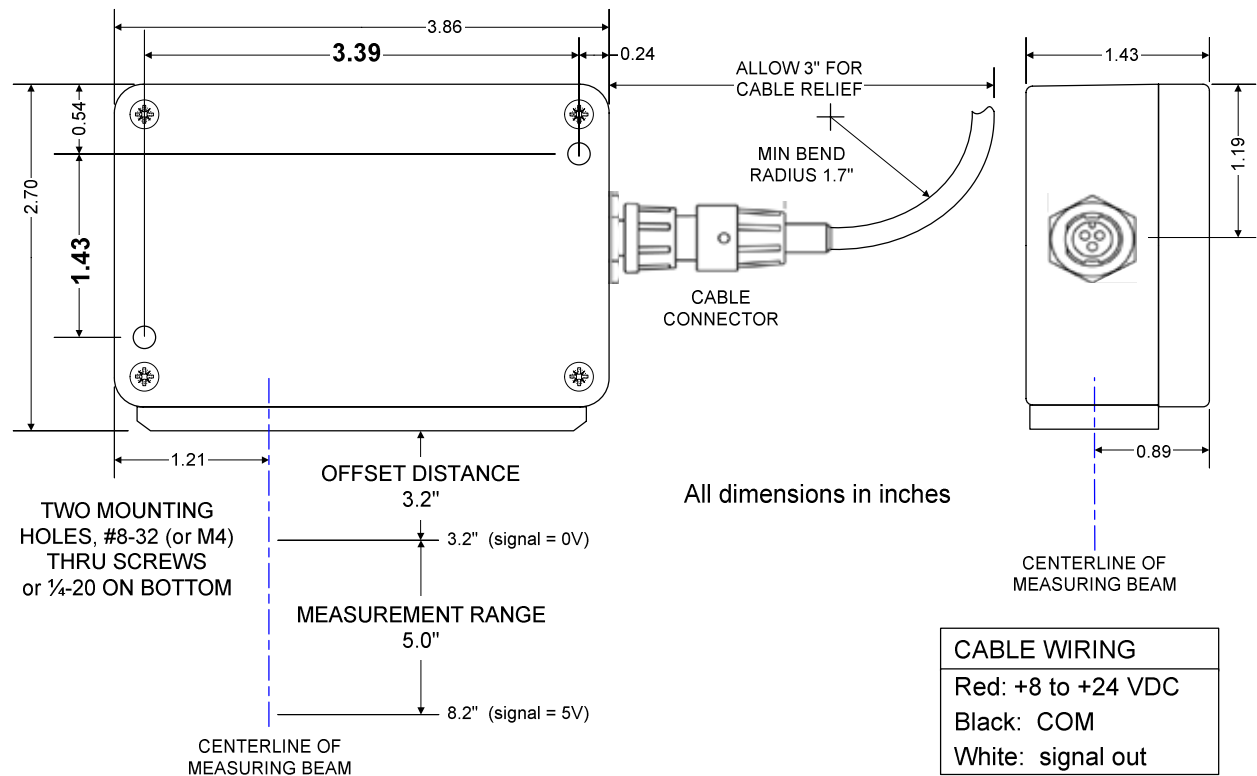
The standard sensor may be perfect for many applications but your testing needs may demand a custom sensor. Aculux develops, prototypes and manufactures custom sensors. Contact Aculux to discuss your unique testing issues and get a sensor that produces the data you need.

**SPECIFICATIONS**

MECHANICAL	
Measurement range	3.2" – 8.2" (81 - 208 mm)
Weight	8 oz (227 g)
Size	3.9" x 2.7" x 1.4" (98x69x36 mm)
Enclosure	aluminum with removable bezel
Enclosure rating	IP67
Cable	3-wire cable with flying leads, 15ft
Windows	Polycarbonate, replaceable
Operating temp.	32 -122 °F (0 – 50 °C)

ELECTRICAL / OPTICAL	
Supply voltage	8-24 VDC at 125 mA
Output signal	0-5 V
Sampling rate, max	1,000 Hz
Accuracy	+/- 0.2% of full scale
Resolution	0.001" (25 um)
Laser source	visible red, class II
Laser spot size at SO	< 0.005" (127 um)
Detector type	PSD

**DIMENSIONS**



**CALIBRATION INFORMATION**

Near point 3.2" 0 V  
 Far point 8.2" 5 V  
 1 inch = 1 volt

**ORDERING INFORMATION**

Model No. LR1-35-050

*Aculux products are made in the USA*

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500-0007-005  
 08/04