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# The World's Most Popular Precision Label Sensors

*Clear • Paper • Metal • Hologram | Versatile • Easy to Use • Reliable*



**LION**  
PRECISION



Over 30,000 Sensors  
Installed Across the Globe

Sense Every Label Material

Unmatched Two-Year  
Warranty

Simple Adjustments that  
Stay Adjusted

Fastest Label Sensors  
Available

Most Accurate Label  
Sensors Available

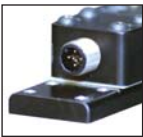
Unparalleled Service

*“The sensors are not only versatile, but incredibly reliable; to date, we’ve never had a replacement.”*

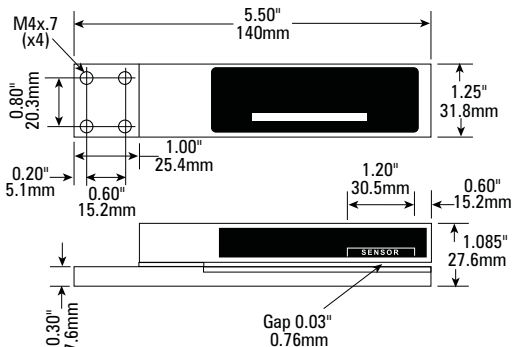
*Jason R., RJD Packaging*

*“It’s working great! It’s saving us a huge amount of rework.”*

*Miles K., Packaging On Demand*



LRD6110C includes an M12 connector instead of attached cable.



## LRD6110

*High-Speed Accuracy for All Labels*

Use the finest capacitive label sensor in the world for reliable, easy label sensing on applicators and slitter/rewinders.

- Works on clear and paper labels
- Works with hot-stamp foils, metallic inks, and high-carbon black ink
- 10-segment light bar for easy setup

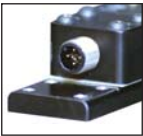
Response Time:	20 $\mu$ S
Accuracy:	0.015" (0.4mm)
Switching Frequency:	10kHz
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24VDC
Short-Circuit and Overload Protection	

# LRD2100

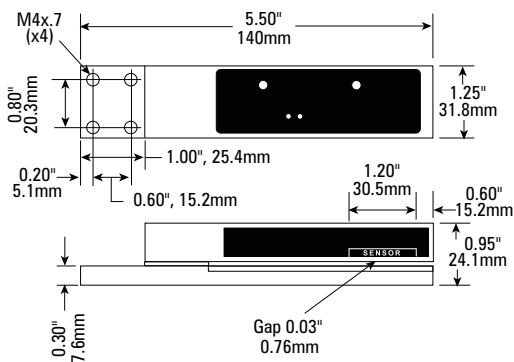
## The Sensor that Started a Revolution

The world's first clear label sensor. Optics-free, capacitive sensing does not require changes in color or contrast to sense labels.

- Works with clear and paper labels
- Extremely stable setup
- Fast, accurate, reliable



LRD2100C includes an M12 connector instead of attached cable.



Response Time:	20 $\mu$ S
Accuracy:	0.008" (0.2mm)
Switching Frequency:	10kHz
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24VDC
Short-Circuit and Overload Protection	

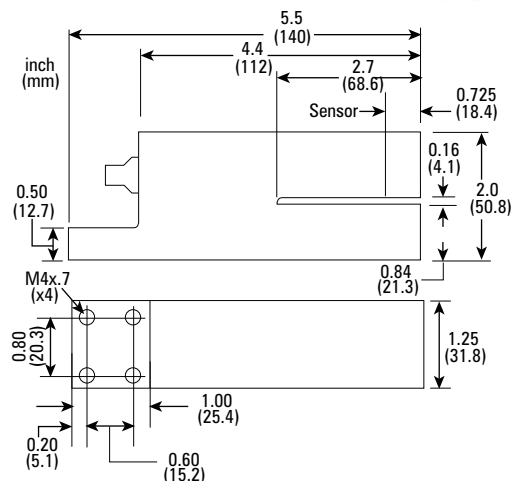
Use the LRD6110 for labels with metallic inks, foil hot-stamps, or high-carbon black ink.

# UltraLRD V2

## Ultrasonic Technology for Every Label Type

Ultrasonic technology provides accurate sensing of any type of label and features a wider fork.

- Works on all label materials
- Single, simple adjustment
- Wide fork



Response Time:	100 $\mu$ S
Accuracy:	0.020" (0.5mm)
Switching Frequency:	500Hz
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24VDC
Short-Circuit and Overload Protection	
Requires 5-pin M12 sensor cable.	

Works with all label materials.

# Specialized Versions

These sensors use LRD2100 sensing technology in unique applications.



## LRD3100

### Clear Label Technology for Small Spaces

Same great performance as the LRD2100 in smaller spaces.

Sensor head can be used with supplied baseplate as pictured, or a baseplate system can be designed into the machinery.

10" (25.4mm) cable from main body to sensor head.  
Same specifications as the LRD2100.



## LRD4100

### Vertical, Multiple Mount for Slitter/Rewinders

Thin, vertical design for accurate and reliable counting of multi-lane clear or paper labels at rewind speeds.

Proper mounting of the sensor is critical to reliable operation, see Lion Precision TechNote, LT04-0020, *LRD4100 Label Sensor Mounting Considerations* available at [www.labelsensors.com](http://www.labelsensors.com).  
Same specifications as the LRD2100.



## LRD5100

### Tear-Tape Sensor

The LRD5100 senses the presence/absence of tear-tape on overwrap film. Works with all tear-tape materials and nonmetallic overwrap.

Same specifications as the LRD2100.

## Selection Chart

LRD sensors are also used for glue, splice, and hole detection. Ask a sales engineer about your unique sensing application.

Our dedication to customer service is unmatched.

	Paper	Clear	Metallic Ink	High-Carbon Black Ink	Hot Stamp	Response Time	Switching Speed (Hz)	Accuracy mils / mm
LRD6110	✓	✓	✓	✓	✓	20µS	10k	15 / 0.4
LRD2100	✓	✓				20µS	10k	8 / 0.2
UltraLRD V2	✓	✓	✓	✓	✓	100µS	500	20 / 0.5
LRD3100	✓	✓				20µS	10k	8 / 0.2
LRD4100	✓	✓				20µS	10k	8 / 0.2

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