LION PRECISION

Precision Label Sensors

LRD SENSORS

HIGH PRECISION NONCONTACT SENSORS

Position
Displacement
High Speed
High Resoluition
Customizable Solutions
Off the Shelf

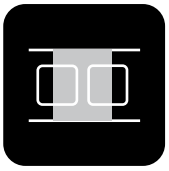
Optics-free sensing technology is at the hear of an LRD clear label sensor. They see labels regular "eyes" cannot see. This improved technology also makes them more precice and much faster than traditional label sensors - even on ordinary paper labels. More than 50,000 LRD label sensors are installed across the globe and testify to their accuracy and reliability.

Label Senasing

Capacitive sensing measures the displacement of the labels to determine location of the leading edge of the label

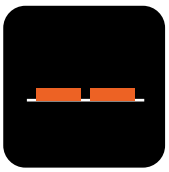
Visual Inspection

High speed visual inspection machines can move at a rate of 300 meters/min. At these speeds, registration errors for tradtional sensors can become an issue, even on paper labels.



Registration Sensing

See-through solid films. LRD's will measure any changes, even those not measurable with traditional photo eyes. Know where your leading edge is to control production of hidden material.



Adhesive LRD

Easily detect the presence or absence of adhesive. With a fast triggering speed and no need for visual inspection, get the job done quickly and reliably with an LRD.

Edge Tracking

Use LRD's to track the edge of your conveyer system. The information provided from our sensor will alow you to set maximum travel tolerances for your belt, preventing costly downtime for repair. Use LRD outputs to steer your conveyer back on track when it wanders.

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LRD5100

Tear-Tape Sensor

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

LRD2100

Capacitive Label Sensor for Metal-Free Labels

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

LRD3120

Clear Label Technology for Small Spaces

Same great performance as the LRD2100 in smaller spaces Very small sensorhead for mounting in tight spaces

LRD8200

Ultrasonic Technology for Ever Label Type

Ultrasonic technology provides accurate sensing of any type of label. Wide fork for bookletsand easy web threading.

Lion Eye2

Traditional Non-Clear Labels

The LionEye2 offers the same reliability all LRD sensors provide for traditional, non-clear labels

M8 Connector only

LRD6300

High-Speed Accuracy, One-Button setup

The finest clear label sensor for reliable, easy-to-set label sensing on applicators and slitter/rewinders

LRD3100

Clear Label Technology for Small Spaces

Same great performance as the LRD2100 in smaller spaces. Sensor head can be used with supplied baseplate or a baseplate can be designed into the machinary

LRD900

Traditional Non-Clear Labels

The LRD900 offers the same reliability all LRD sensors provide for traditional, non-clear labels

M8 connector only.

Need assistance? Please contact Lion Precision at 651 484-6544 or info@lionprecision.com

Product Selection Guide

Product Selection Guide			2100	3100	3120	5100	6300	8200	LionEye2	900
STANDARD TECHNICAL SPECIFICATIONS	Model	Integral Cable	P017-990	P017-9932	P017-9921	P017-9950	P017-6300			P017-9890
		M8 Connector							P015-3775	
		M12 Connector	P017-9901			P017-9951	P017-6301	P016-6100		
	Hardware	Technology	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive	Ultrasonic	Optical	Optical
		Adjustment Type	Screw	Screw	Screw	Screw	Button	Button	Button	Screw
		Bar Graph Display					✓	✓		
		Selectable Light/ Dark Display	Wired	Wired	Wired	Wired	Button	Button	Wired	Wired
		Outputs	NPN and PNP	NPN and PNP	NPN and PNP	NPN and PNP	NPN and PNP	NPN and PNP	NPN and PNP	NPN and PNP
		Power In	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	12 to 30 VDC	10 to 30 VDC
		Operating Temperature	40 - 140 F (4 - 60 C)	40 - 140 F (4 - 60 C)	40 - 140 F (4 - 60 C)	40 - 140 F (4 - 60 C)	40 - 140 F (4 - 60 C)	40 - 140 F (4 - 60 C)	40 - 120 F (4 - 50 C)	32 - 140 F (-4 - 60 C)
	Performance	Max Response Time	20 µS	20 µS	20 µS	20 µS	15 µS	425 µS	50 µS	50 µS
		Max Switching Freq.	10 kHz	10 kHz	10 kHz	10 kHz	10 kHz	1 kHz	10 kHz	10 kHz
		Accuracy @ 60 m/min	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.006 in (0.15 m)	0.008 in (0.20 m)	0.008 in (0.20 m)
		Accuracy @ 250 m/min	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.002 in (0.05 m)	0.024 in (0.60 m)	0.008 in (0.20 m)	0.008 in (0.20 m)
TYPICAL SENSING PROCESSES	Label	Clear	✓	✓	✓		✓	✓		
		High-Carbon Black Ink					✓	✓		
		Metallic Ink					✓	✓	Nonclear	Nonclear
		Paper	✓	✓	✓		✓	✓	✓	✓
		Hologram	✓	✓	✓		✓	✓		
		Hot Stamp					✓	✓	Nonclear	Nonclear
		Solid Foil & Metal					Most	✓	✓	✓
	Registration	Hole Detection	✓	✓	✓		✓	✓	Nonclear	Nonclear
		Tear-Tape				✓				
		Multiple Film Layers					✓			
	Inspection	Slitter/Rewinder	✓	✓	✓		✓	✓		
		Splice Detection	✓	✓	✓		✓	✓	Nonclear	Nonclear
		Glue & Adhesives	✓	✓	✓					
		Edge Tracking								
MANUAL NUMBER			M017-9900	M017-9930	M017-9920	M017-9950	M017-6300	M016-6100	M017-3775	M017-9890

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