

# Press Release

Mark Kretschmar  
Lion Precision  
Communication Manager  
651-484-6544, fax 651-484-6824  
mark@lionprecision.com

## **New Capacitive Proximity Switch Has High-Resolution Analog Output And User Adjustments**

St. Paul, MN USA, February 15, 2011

The CPA100 Capacitive Sensor from Lion Precision has a setpoint (switched) output to indicate presence/absence like a typical proximity switch, but the nonlinear analog output is capable of resolutions as low as 15 nm RMS (150 nm p-p). The new sensor features a unique front panel range indicator to alert the operator to out-of-range conditions, DIN rail mount electronics, and user adjustments for Offset (Zero) and Gain. A selection of probes provides standard measurement ranges from 0.05 to 6 mm. Offset and Gain can also be controlled with remote potentiometers if the device is enclosed in a control panel. Sync connectors allow interference-free use of multiple sensors with the same target.

Typical applications for the CPA100, besides basic position monitoring, include production line part sorting; double sheet detection in printers or related processes; and monitoring of processes involving nonconductive materials such as films, fabrics, and applied coatings such as adhesives.

More detailed information is available at <http://www.lionprecision.com/cpa100>

### CPA100 Specifications:

Resolution:	0.03%F.S. RMS @ mid-range @15 kHz (typical)
Bandwidth:	15 kHz (-3dB)
Maximum Temp. Drift:	Electronics: 0.2% F.S./°C; Probe: 0.05% F.S./°C
Analog Output:	0-10 VDC
Setpoint Output:	Solid state switch closure; 30 VAC/60 VDC max
Operating Temperature:	40°F-120°F; 4°C-50°C
Input Power:	15-24 VDC, 2.5 W

Lion Precision provides high-resolution capacitive and eddy-current noncontact displacement sensors that are optimized for specific applications including custom designs. Precision position and high-speed motion are common applications for these high-performance sensors. Lion Precision products are used in large industrial measurements and subnanometer resolution measurements of the micro- and nano-technology worlds.

Lion Precision, an ISO9001:2008 registered company, was founded in 1958 by Dr. Kurt Lion, a professor at MIT (Massachusetts Institute of Technology). He was the first to develop capacitive sensing into a broad industrial measurement solution.

For more information on Lion Precision, visit [www.lionprecision.com](http://www.lionprecision.com) or contact the company directly at:

Lion Precision  
563 Shoreview Park Rd.  
St. Paul, MN 55126 USA  
651-484-6544  
[www.lionprecision.com](http://www.lionprecision.com)  
[info@lionprecision.com](mailto:info@lionprecision.com)

###