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*Design kit provides simple compensation of device variation, repeatable output...*

## **OPTEK'S AUTO-CALIBRATION DESIGN KIT INTERFACES WITH, EVALUATES OPTOELECTRONIC SENSOR COMPONENTS**

CARROLLTON, TX (December 4, 2008) — Providing design engineers with a simplified means of compensating for device-to-device variation in optoelectronic sensors, TT electronics OPTEK Technology has developed an automatic calibration design kit. The OCB100-Kit features a driver board with three different optoelectronic circuits to enable design engineers to easily calibrate optoelectronic devices, provide a consistent output signal, and shorten their design cycle.

“The OCB100 Series driver board is configured to calibrate reflective or interruptive devices, allowing designers to compensate for device variations due to manufacturing differences, temperature changes, power fluctuation and device aging commonly present in optoelectronic systems,” said Alan Bennett, vice president of sales and marketing for OPTEK Technology. “Requiring only an external power supply and the optical device to be tested, the design kit enables engineers to easily adapt and calibrate any OPTEK sensor to any unique application.”

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## **OPTEK'S AUTO-CALIBRATION DESIGN KIT EVALUATES SENSOR COMPONENTS, PG.2**

The OCB100 Series system calibrates reflective, interruptive and special opto sensors to produce a consistent output, eliminating the need to confirm either the LED drive resistance or phototransistor load resistance to provide a steady state condition. The reliability and consistency of the system is further enhanced by giving the designer the ability to narrow the device's expected startup output state. Degradation of the LED or phototransistor is compensated for each time the system is calibrated.

Optoelectronic devices can be mounted directly to the OCB100 Series driver board, or use a connectorized configuration to provide for remote mounting.

Four lights are featured on the board that indicate: when the device is calibrated (green LED flashes 3 times); that the device could not be calibrated (red LED); and when the analog output has reached the logical trip point higher than the calibration point (blue LED) or lower than the calibration point (green LED). The internal phototransistor load resistance can be set for three different values ( $\sim 2.5\text{K}\Omega$ ,  $\sim 9.6\text{K}\Omega$  or  $\sim 27\text{K}\Omega$ ).

The OCB100 Series auto-calibration design kit includes:

- OCB100CZ – PC board calibration circuit, including OCB100 MC24 mating cable;
- OPB350C125Z – Fluid sensor for 0.125" (3.18mm) O.D. tubing;
- OPB732CZ – Medium distance reflective object sensor;
- OPB885CZ – Slotted switch with 0.375" (9.53mm) slot width;
- 0.125" tubing sample;
- Label/liner sample.

Pricing for the OCB100 auto-calibration design kit ranges from \$42.59 to \$31.94 each, depending on quantity. The design kits are available immediately.

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### **OPTEK'S AUTO-CALIBRATION DESIGN KIT EVALUATES SENSOR COMPONENTS, PG.3**

For more information about OPTEK's OCB100 auto-calibration design kit, contact TT electronics OPTEK Technology at 1645 Wallace Dr., Carrollton, TX, 75006; call 972-323-2200, or visit OPTEK on the web at <http://www.optekinc.com/viewparts.aspx?categoryID=78>. In Europe, contact JP Delaporte at [info@optek-europe.com](mailto:info@optek-europe.com). In Asia, contact T.H. Swee at [thswee@optekasia.com](mailto:thswee@optekasia.com) or call +852-9190-4641.

OPTEK is a leading manufacturing and solutions provider for sensing and illumination covering the infrared, visible and ultraviolet spectrum; with standard as well as application specific products for a variety of markets, including, but not limited to office machines, industrial equipment, encoders, automotive electronics, military and high-reliability applications, medical diagnostic equipment and solid-state lighting. Headquartered in Carrollton, TX, the company is ISO/TS16949:2002 and BS EN ISO 9001:2000 certified, as well as ITAR registered. OPTEK Technology was acquired by TT electronics in December 2003.

TT electronics plc is a global electronics company manufacturing a broad range of advanced electronic components, assemblies and sensor modules for the automotive, industrial, telecommunication, computer and aerospace markets.

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***To request the electronic image, call 919-872-8172, or e-mail: [bgaddy@btbmarketing.com](mailto:bgaddy@btbmarketing.com)***

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