# special Sensor, Test & Measurement



#### SPOT THERMAL IMAGING CAMERA

The TG130 reduces energy costs and detects issues



Conrad Business Supplies introduced a new spot thermal camera from manufacturer FLIR Systems to its range of over 1,200 thermal detection devices and equipment. The TG130 is designed to identify trouble spots and leaks, so to help save on heating and cooling bills in small offices and homes. The device benefits from thermal camera technology that uses a Focal plane array (FPA) and an

uncooled microbolometer to give accurate temperature readings. This provides the user with a clear indication of heat loss around doors, floors, walls, pipes, or windows. Ideal for seasonal inspections, the TG130 is easy-to-use, easy to carry and rugged enough to be dropped from up to 2m, without suffering damage.

>> 51541 at www.ien.eu



## WIRELESS WEIGHING TECHNOLOGY

It could help shipping operators



Designed and manufactured by Banbury based Sensor Technology, LoadSense can be easily integrated within the crane hook. It allows weighing processes to be fully integrated with handling operations.

All live data is captured in real time and can be transferred to a database, stored, totalised and analysed. An on-board single chip computer records, analyses and archives readings, while wireless communication capability can transfer data in real time to a host computer. LoadSense employs internal batteries, which make its operation completely autonomous. As such it can be deployed with minimal disruption to mobile harbour crane operations, and will automatically begin transmitting data. No special training is required to install or operate the unit.

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### THERMAL IMAGING CAMERA

For the detection of temperature differences



The FLIR T420 from FLIR Systems is an affordable thermal imaging camera that combines excellent ergonomics with top performance and high image quality. The FLIR T420 comes with a tiltable optical unit which makes it possible to measure and take images of objects at all angles,

while still operating in a comfortable working position. When something goes wrong in a PCB, whether it is improper soldering of a circuit or a failing component, the PCB will heat up. Therefore, thermal imaging offers a very good way to diagnose problems in the design phase of a PCB, to test it before it is supplied to a customer or in the qualification stage. A FLIR thermal imaging camera to detect hot spots of less than 125 x 125 microns in size that may indicate a PCB component is likely to fail.

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#### ONLINE HUMIDITY CALCULATOR

It calculates measurement uncertainties



Based on known ambient conditions, the E+E humidity calculator converts among all humidity-related parameters, such as relative humidity, dew point / frost point temperature, water vapour density, mixing

ratio, partial water vapour pressure and specific enthalpy. Calculations can be made in metric (SI) as well as imperial (US) units. Unique is that the E+E humidity calculator takes into account measurement uncertainties in the calculation. This means that realistic and reliable total uncertainties can be calculated based on the accuracy specification of the measuring device. The app also features a pressure dew point calculator specifically tailored for compressed air applications.

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#### CALIBRATED CURRENT SENSORS

Providing high voltage isolation ratings



Melexis has expanded its portfolio of current sensing devices, based on cutting-edge implementation of Hall effect technology, by announcing the MLX91210 family. Running off a 5V supply, MLX91210 ICs have current sensitivity levels down to 26.7mV/A

and support linear current measurement ranges that span as far as ±75A corresponding to 30ARMS current. Available in SO8 and SO16 package formats, these sensors have extremely low resistive losses provide high voltage isolation ratings, as well as accelerated responsiveness. The sensor output of each IC is factory-calibrated for a specific current range and compensated for optimal stability in relation to temperature and over the course of its working lifespan, so that long term accuracy is maintained.

>> 51549 at www.ien.eu



### **ELECTROPHYSIOLOGY PLATFORMS**

Motorised, Manual and Fixed



The Z-Deck range from Prior Scientific includes adjustable platforms designed specifically for upright microscopes used in electrophysiology and neuroscience applications, including Nikon FN1, Olympus BX51WI or BX61WI, Zeiss Axio Examiner and Leica DM6 microscopes. Compatible with

most commercially available vibration isolation tables, the exceptionally stable Z-Deck platform offers a large surface working area, allowing for the creation of even the most complex experimental set-ups. Using the Z-Deck you can switch between whole organism and cellular imaging heights in seconds without the use of tools. The design of the platform facilitates undertaking Köhler illumination experiments at a range of focus heights.

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