

# Advertorials

## The first of its kind, non-flammable displays, the new BLO Series meets DIN EN 13501-I standards

Unique to the display market, Display Technology Ltd are pleased to announce their sister company Distec GmbH have launched their new range of monitors the BLO series, the new range are certified to DIN EN 13501-I safety standards and come in sizes 24" to 65" with a touchscreen option.

The monitors are fitted with sturdy sheet steel housing and fire protection glass.

To meet the DIN EN 13501-I safety standard the product was tested through a European fire testing service 'Euroclass' – Euroclass is a reaction to fire testing and classification systems for linings and materials in Europe. The monitor was exposed to open fire for 30 minutes and the flue gas emission was measured.

- The classes are divided into 7 main levels A1, A2, B, C, D, E and F, A1 is the best
- The classes for smoke are divided into s1, s2 and s3, s1 is the best
- The classes for flaming droplets and particle are divided into: d0, d1 and d2, d0 is the best

The BLO monitors reached A2-s1, d0 when tested, receiving certification for DIN EN 13501-I

The new BLO monitors can be fitted with an optional fire extinguisher. This is a small capsule built within the monitors chassis.

Once the exterior of the capsule reaches a certain temperature, the capsule releases the specially designed fluid within to extinguish any fire that has reached the interior of the monitor.

In addition there is an option to have higher IP protection classes if required

This makes Distec the first supplier on the market to offer an independent fire load and flue gas optimised monitor according to the highest fire protection class DIN EN 13501-I (A1-s1 d0).

[www.displaytechnology.co.uk](http://www.displaytechnology.co.uk)



## Secure and safe waterproof connections from E-tec Interconnect

When waterproofing is a consideration for reliably connecting wires, the IPX7 rating afforded by the use of solid rubber seal rings is a proven method. The 2mm pitch E-tec range allows 2, 3 or 4 wires to be plugged and unplugged. These are held securely in place with an inner housing lock. The sprung construction of the phosphor bronze contact receptacle and mating plug deliver a reliable 3A rating for wires AWG #22 to #26.



This connector system can be supplied incorporated in a complete cable assembly terminated to customer requirements. For more information, technical details and pricing, please use the contact details below or email [info@e-tec.co.uk](mailto:info@e-tec.co.uk).

**E-tec Interconnect (UK) Ltd**  
**Tel: 01892 530 260**  
**[www.e-tec.co.uk](http://www.e-tec.co.uk)**

## Optical rotary torque sensors suitable for low torque and high band width measurements

Sensor Technology has set new benchmark performance standards for optical rotary torque transducers, with the launch of the digital ORT 230/240 series. These new optical rotary torque sensors are ideal for applications when the demand is for low torque and/or high bandwidth, providing precise, dynamic measurement of rotary and static torque from 10mNm up to 100Nm and for bandwidths of up to 50kHz.



The new ORT 230/240 devices replace Sensor Technology's E200 ORT series, benefiting from all-new electronics that deliver significant gains in resolution, frequency response, reduced sensor current consumption and faster digital data throughput.

The high speed capability comes from an inherently low inertia, since the electronics are not fixed to the shaft, while non-contact operation ensures a long and reliable life (backed up by Sensor Technology's lifetime warranty) with high accuracy. The optical operating principle also ensures excellent noise immunity.

TorqSense ORT 230 series sensors provide fixed voltage or current analogue outputs – one for torque and one for either speed or power. The TorqSense ORT 240 provides two user selectable voltage or current analogue outputs – one for torque and the other for either speed, power or peak torque – plus digital outputs including RS232, CANbus and USB for interfacing with modern instrumentation and laptops. The ORT 240 enables users to connect up to 10 transducers via USB, and transducer configuration software for making changes to transducer variables.

Features of both devices include self-diagnostics to report if the transducer's torque, speed ratings or calibration date have been exceeded, while inbuilt sensors monitor shaft temperature for better compensation and accuracy. The device also offers a simple 'sensor status' output.

Complementing these products is Sensor Technology's TorqView software, providing an easy-to-use advanced torque monitoring package for Windows PCs to assist with data display and recording. It offers real time chart plotting, and is compatible with both Matlab and Excel. Further, LabVIEW VIs are available for users to design their own process control applications, and DLLs are available for users who wish to write their own custom software.

These latest optical rotary torque sensors are an important extension to the Sensor Technology torque monitoring range, and offer an alternative solution when low torque or bandwidth requirements preclude the use of the more cost-efficient SAW-based TorqSense products.

Optical rotary torque sensors use a pair of gratings attached a short distance apart on a strain-sensitive shaft to modulate a light source. As torque is applied to the shaft, a slight twist results which changes the alignment of the gratings and thus varies the light transmitted through to a detector. The use of this technique results in a transducer which is able to detect torque bi-directionally, and which has a fast mechanical and electrical response, low inertia and complete freedom from brushes or complex electronics.

The absence of brush gear allows high-speed operation with a continuous rating up to 30,000rpm standard. Further increases in rpm are available depending upon shaft size. The torque shaft is of low compliance 1/2" maximum torsion deflection on the smaller transducers and 1/4" maximum on the larger transducers at full-scale deflection. Any full scale torque can be specified within the range 10mNm to 100Nm.

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## 0.96" IPS TFT LCD

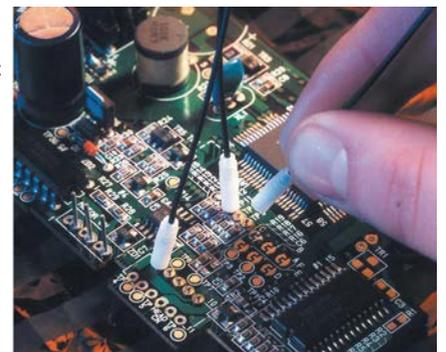
The latest addition to Craft Data's range of TFT LCD is probably the smallest module readily available today. The 0.96", 80 x 160 resolution display is an IPS panel offering ultra-wide viewing angles of 80°/80°/80°/80°. It has a "Free View" viewing direction meaning it can be mounted in both portrait (default) and landscape orientations without the loss of image quality or colour. A contrast ratio of 800:1 and a 262K colour palette plus a single LED backlight producing a brightness of 400cd/m<sup>2</sup> further enhances the displays optical performance. The compact module measures just 13.5 x 29.95 x 1.5mm with an active area of 10.8 x 21.7mm, it incorporates the ST7735S driver IC which includes a versatile 4-line SPI interface. The module's low current consumption for both the VDD at just 2mA and the LED backlight at between 15~20mA makes it highly suited to battery powered applications.



**Craft Data Limited**  
**Tel: 01296 332000**  
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## Oxley Developments surface mount applications

Surface Mount Oxley (SMOX) available for hand or automatic assembly with a compatible mating socket for quick test set up can be used for a range of applications; the ability to quickly and individually identify faulty components, cracked solder joints or short circuits.



SMOX have a minimum contact resistance (less than 2mΩ) through 8 points of contact. On thick multi-layered boards, where complex track designs can lead to very expensive PCBs, the benefits of quickly and effectively identifying and repairing any faulty populated PCB can be easily recognised.

In order to guarantee excellent solder fillets to be formed we use a chamfer design on our low profile SMOX, ensuring a stronger connection to the board.

Why not contact Oxley today on **01229 483270** or [sales@oxleygroup.com](mailto:sales@oxleygroup.com) for more information?