# MMS Electronics Ltd

# Sensors and controls













UTI for resistive and capacitive measurements ZWYSTEC 010101 SMT UTI DUT



## **Smartec Temperature sensors**

SMT-160-30

Smartec digital sensors are ideal for thermal monitoring and control in a wide variety of applications. Using a microprocessor without AD converter. Sensors have absolute accurate of 0.7°C without calibration. Accuracy can be improved with calibration. Resolution 0.02°C. Output linear within 0.2°C. Temp range -45°C to 130°C. 3-pin device with integrated sensor circuitry and PWM square wave output.

## **Digital Temperature Probe**

Robust, ready to use 7x40mm stainless steel probe using our most accurate temperature sensor SMT160-30-18. Probe is supplied with a 5 m shielded cable.

#### **Temperature Acquisition for 4 or 8 sensors SMTAS04 & AS08**

These quick-start evaluation boards are developed for accurately monitor one or multiple temperatures with Smartec digital temperature sensors. Up to 4 sensors can be connected to the SMTAS04 and 8 to the SMT-AS08. Supplied with free data logger software. Available with RS-232 or USB interface. No external power supply is required for the USB version. Sensor cable lengths up to 20m.

### **New - Pressure sensors**

Smartec manufactures a wide range of absolute, gauge, amplified analogue or digital output pressure sensors. Range from 10mBar - 6.5PSI / 100 Bar. Temperature compensated. Surface mount, single in line and Hybrid elements. To many to list please check www.mms-e.co.uk for full details. For easy digital interface see the UTI sensor interface shown below.

#### Infra-red non-contact temperature sensor **SMT-IR9901/02/SIL**

The Smartec infrared sensors are sophisticated full silicon thermopile sensors. The sensors are particular suited for non-contact measurement of surface temperature by monitoring heat radiated from the surface. High Accuracy. Low cost. Fast response time 40mS. Typical applications: temperature measurement on moving objects, medical and gas analysis, thermal alarm and climate control.

#### **SMT-IRMOD09 New - I2C** Infra-red temperature interface

The SMT-IRMOD09 infra red modules allow immediate temperature readings. All modules are fitted with I2C interface. When ordering the I2C to USB converter SMT-AS02I2, the sensor connects directly to a PC. Both the object temperature and ambient temperature available. 3V or 5V supply version. Fields of view from 14° to 120°. Size SMT-IRMODmicro 15.5 x 8.5mm and the SMT-IRMOD09SIL 34 x 16mm.

## Sensor Interface / Universal Transducer Interface

The UTI is a highly accurate, stable measuring system. Auto calibrated. A digital sensor interface for virtually all kinds of resistive bridge and capacitive type sensors including platinum resistors Pt100, pressure transducers, strain gauges and humidity sensors. Capacitive level sensors can be directly connected to the SMT-UTI. Ideal for micro controller based systems. Supply 3..5V. Quick-start development board.

## **Humidity sensor**

The Smartec humidity sensor, unlike others, measures RH from 0 to 100% without any reduction in performance. Its construction means that it is not affected by temperature or pressure. The sensor is a two terminal capacitor, which increases in value as water molecules are absorbed into its active polymer dielectric. High accuracy. Reliable construction. Easy interface by using the UTI sensor interface.

> MMS Electronics Ltd South View Business Park Ghyll Royd Guiselev Leeds LS20 9PP

Tel: 01943 877 668

Fax: 01943 870 237

Web: www.mms-e.co.uk