INTRODUCING

MS5525DSO (DIGITAL SOIC-14) PRESSURE SENSOR

- Save space with fully calibrated pressure and temperature sensor in a small package
- Measure pressure from 0-1 to 30 psi with 24-bit digital output



TE Connectivity (TE) introduces the MS5525DSO, a new generation of digital small outline integrated circuit pressure sensors that measure pressure and temperature for applications such as CPAP (continuous positive airway pressure) and ventilators. This sensor module includes a pressure sensor and an ultra-low power 24-bit $\Delta\Sigma$ ADC with internal factory calibrated coefficients. It provides a 24-bit digital pressure and temperature value, and different operation modes that allow the user to optimize for conversion speed and current consumption. TE's MS5525DSO can be interfaced to virtually any microcontroller using a simple communication protocol. The rugged, engineered thermoplastic transducer is available in single and dual port configurations, and can measure absolute, gauge, differential, and compound pressure from 1 to 30 psi.

DISTINGUISHING CHARACTERISTICS

- Save space with a fully calibrated temperature Small Outline IC (SOIC) Package
- Integrated 24-bit Digital Pressure and Temperature Sensor
- I2C and SPI Interface
- Low Power, 1μA (standby <0.15μA)
- Pressure Range: 0-1 to 30psi
- Pressure Types: Absolute, Differential, Gauge, Compound
- Package Styles: Single Tube, Single Barb, Dual Barb, Dual Hole

APPLICATIONS

- CPAP
- Ventilators
- Pneumatic Control
- Altitude and airspeed measurements
- Gas flow sensing
- Valve control system
- HVAC monitoring
- Leak detection

BENEFITS

- Save space with a fully calibrated temperature compensated sensor with a Total Error Band (TEB) of ±2.5% FS over the compensated range
- Measure absolute, gage, differential, or compound pressure from 0-1 to 30 psi with high resolution digital output
- Save space with a PCB mountable, small outline IC package
- Facilitate a simple communication protocol without the need for programming internal registers
- Enable design style flexibility with single tube, single barb, dual barb and dual hole configurations

LEARN MORE

Pressure Sensors Overview Page
MS5525DSO Pressure Sensor Overview Page
MS5525DSO Pressure Sensor Datasheet
MS5525DSO Parts List

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