

INTRODUCING MS5837-02BA ULTRA-SMALL GEL-FILLED PRESSURE & TEMPERATURE SENSOR

- Provides precise digital 24-bit pressure and temperature value with ultra-low power consumption
- Improved endurance in chlorine environments



One of the smallest gel-filled watertight altimeters in the market! Take your devices to the next level with TE Connectivity's (TE) new generation of MS5837-02BA pressure sensor modules. This ultra-small gel-filled pressure sensor is optimized for both altimeter and barometer applications. Expanding on TE's MS5837 series of ultra-compact digital altimeters, our new generation 2 bar models offer options for chlorine resistance and shielding.

APPLICATIONS

- Multisport watches
- Fitness trackers
- Swim watches
- Bike computers
- Mobile altimeter/barometer systems
- Personal navigation devices
- Drones
- E-cigarettes
- Other autonomous vehicles

KEY BENEFITS

- Provide precise digital 24-bit pressure and temperature value with ultra-low power consumption
- Support design flexibility with ultra-small size while providing precise outputs: 3.3 x 3.3 x 2.75 mm
- Enable depths up to 100m with watertight seal with 1.8 x 0.8 mm O-ring
- Enhanced construction and design materials offer a high endurance, chlorine resistant model suited for devices that will be exposed to environments with chlorine.
- Reduce signal noise and interference that may be experienced with sensors installed in plastic housings or high electrical noise environments with new our shielded models

PERFORMANCE

- Extended Pressure Range: 10 - 2K mbar
- Pressure Accuracy: Down to ± 0.5 mbar (600-1000 mbar)
- Pressure Resolution: 0.016 mbar (OSR 8192)
- Overpressure: 10 bar
- Operating Temperature Range: -20 to +85°C
- Temperature Accuracy: $\pm 2^\circ\text{C}$ (300-1100 mbar)
- Temperature Resolution: 0.002°C (OSR 8192)
- Supply Voltage: 1.5 to 3.6V
- Long Term Stability: ± 2 mbar/yr
- Standby Supply Current: $< 0.1 \mu\text{A}$
- Interface: I²C
- Output Word: 24 bit

TARGET MARKET

- Consumer Devices

LEARN MORE

[Board Level Pressure Sensors Product Group Page](#)

[MS5837-02BA Product Page](#)

[MS5837-02BA Product Datasheet](#)

[MS5837 Series O-ring Mount Application Note](#)

[MS5837-02BA Pressure Sensor Infographic](#)

[Board Mount Pressure Sensors Selection Guide](#)

[Board Mount Pressure Sensors Video \(English\)](#)

[MS5837-02BA Part List](#)