

# Features and Benefits

## PROPRIETARY HONEYWELL TECHNOLOGY

Combines high sensitivity with high overpressure and burst pressure while providing industry leading stability—performance factors that are difficult to achieve in the same product; this gives the customer more flexibility in sensor implementation and reduces the customer design requirements for protecting the sensor without sacrificing the ability to sense very small changes in pressure.

## PROTECTED BY MULTIPLE GLOBAL PATENTS

## INDUSTRY-LEADING LONG-TERM STABILITY

Even after long-term use and thermal extremes, the sensor's stability remains best in class:

- Minimizes system calibration needs.
- Improves system performance.
- Helps support system uptime by minimizing the need to service or replace the sensor during its application life.

## TOTAL ERROR BAND (TEB)

Honeywell specifies TEB—the most comprehensive, clear, and meaningful measurement—that provides the sensor's true performance over a compensated range of 0 °C to 50 °C [32 °F to 122 °F] (see Figure 1):

- Minimizes individually testing and calibrating every sensor, decreasing manufacturing time and process costs.
- Improves system accuracy.
- Provides enhanced sensor interchangeability—there is minimal part-to-part variation in accuracy.

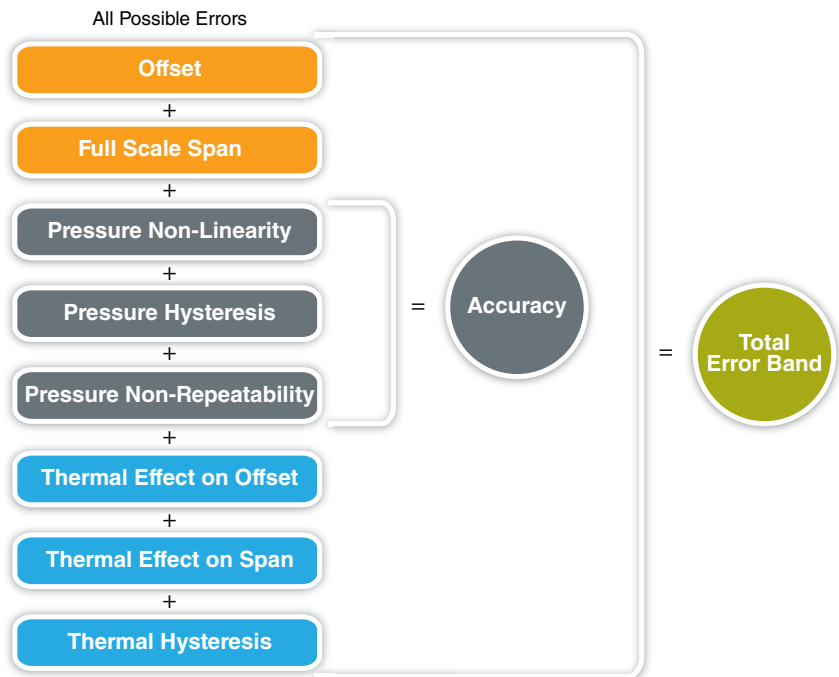


Figure 1. TEB Components for TruStability® Board Mount Pressure Sensors

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## INDUSTRY-LEADING ACCURACY

Extremely tight accuracy of  $\pm 0.25$  %FSS BFSL (Full Scale Span Best Fit Straight Line) reduces software needed to correct system inaccuracies, minimizing system design time:

- Avoids additional customer calibration.
- Helps to improve system efficiency.
- Often simplifies software development.

## HIGH BURST PRESSURES

- Promotes system reliability and reduces potential system downtime.
- Can simplify the design process.

## HIGH WORKING PRESSURE RANGES

Allows ultra-low pressure sensors to be used continuously well above the calibrated pressure range.

## INDUSTRY-LEADING FLEXIBILITY

Modular, flexible design with many package styles (with the same industry-leading stability), pressure ports, and options simplify integration into the device manufacturer's application.

## WIDE VARIETY OF PRESSURE RANGES

From  $\pm 1.6$  mbar to  $\pm 10$  bar |  $\pm 160$  Pa to  $\pm 1$  MPa |  $\pm 0.5$  inH<sub>2</sub>O to 150 psi provide support for many unique applications.

## MEETS IPC/JEDEC J-STD-020D.1 MOISTURE SENSITIVITY LEVEL 1 REQUIREMENTS

- Allows the customer to avoid the thermal and mechanical damage during solder reflow attachment and/or repair that lesser rated products would incur.
- Allows unlimited floor life when stored as specified ( $\leq 30$  °C/85 %RH), simplifying storage and reducing scrap.
- Never requires lengthy bakes prior to reflow.
- Stable and usable shortly after reflow process allows for lean manufacturing.

## OPTIONAL INTERNAL DIAGNOSTIC FUNCTIONS

- May reduce the need for redundant sensors in the system.
- Detects most internal failures including burst sensors.

## ENERGY EFFICIENT

Extremely low power consumption (less than 10 mW, typ.):

- Reduces system power requirements.
- Enables extended battery life.
- Optional sleep mode available upon special request.