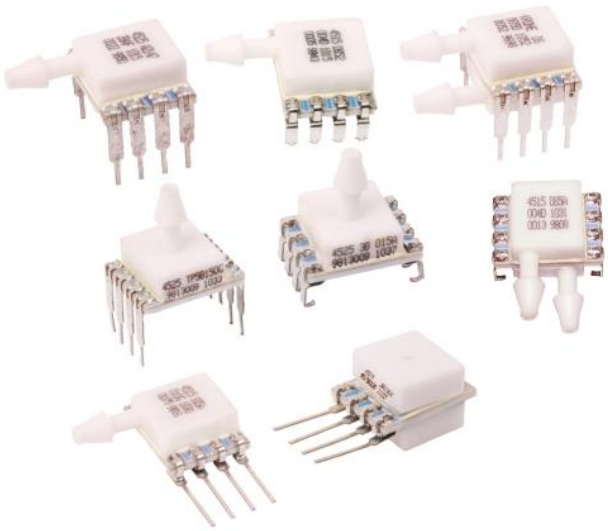
## Product Definition

# PC Board Mountable Pressure Sensor
# Combination Temperature and Pressure
# Analog Output and I²C or SPI Digital Output
# Gage, Differential, Absolute, Compound, Vacuum
# 3.3 or 5.0Vdc Supply Voltage

### MS45xx Series

The MS45xx series is a small, ceramic based, PCB mounted pressure transducer using Measurement Specialties' proprietary UltraStable™ technology (MS4525/MS4525DO) and the latest CMOS sensor conditioning circuitry. This series contains both analog output (MS4515/MS4525) and digital output (MS4515DO/MS4525DO) where the digital output versions feature either I²C or SPI interface and provide 14-bit pressure as well as 11-bit temperature sensing.



It is fully calibrated and temperature compensated with a total error band (TEB) of less than 1.0% over the compensated range. The sensor operates from a single supply of either 3.3 or 5.0Vdc and requires a single external component for proper operation. The rugged ceramic transducer is available in side port, top port, and manifold mount and can measure pressure up to 30in$H_2O$ (MS4515/MS4515DO) and 150psi (MS4525/MS4525DO). The 1/8" barbed pressure ports mate securely with 3/32" ID tubing.

RoHS

### FEATURES

- PCB Mountable
- High Level Analog Output and I²C or SPI Digital Output
- Barbed Pressure Ports
- in$H_2O$ and PSI Pressure Ranges

### APPLICATIONS

- Blocked Filter Detection
- Altitude and Airspeed Measurements
- Medical Instruments
- Fire Suppression System
- Panel Meter
- Factory Automation
- Leak Detection
- Vacuum System Process Controls

# MS45xx Series

## Product Definition

| Model | Pressure Ranges | Type (G = Gage A = Absolute D = Differential C = Compound, V = Vacuum) | Output (% Vs) | Supply Voltage (Vs) | Compensated Temperature | Unique Feature |
|---|---|---|---|---|---|---|
| MS4515 | 0 – 2, 4, 5, 10, 20, 30 $inH_2O$ | G, D | 10% to 90% 5% to 95% | 3.3, 5.0Vdc | 0°C to 60°C | $inH_2O$ Range Analog Output Temperature & Pressure |
| MS4515DO | 0 – 2, 4, 5, 10, 20, 30 $inH_2O$ | G, D | 14-bit Digital Word SPI or I²C | 3.3, 5.0Vdc | 0°C to 60°C | $inH_2O$ Range Digital Output Temperature & Pressure |
| MS4525 | 0 - 1, 2, 5, 15, 30, 50, 100, 150psi | G, A, D, C, V | 10% to 90% 5% to 95% | 3.3, 5.0Vdc | -10°C to +85°C | Low Pressure Range Analog Output UltraStable™ |
| MS4525DO | 0 - 1, 2, 5, 15, 30, 50, 100, 150psi | G, A, D, C, V | 14-bit Digital Word SPI or I²C | 3.3, 5.0Vdc | -10°C to +85°C | Low Pressure Range Digital Output UltraStable™ Temperature & Pressure |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