

## NPA Surface-Mount Pressure Sensors

NovaSensor NPA Series of Surface-Mount Pressure Sensors features a high stability SenStable<sup>®</sup> piezoresistive MEMS chip placed in a SOIC 14-pin miniature thermoplastic package, and is intended for printed circuit board mounting. The sensor module contains a pressure sensor die and a signal-conditioning ASIC that eliminates the need for an additional IC from the customer. The NPA Series is available in single and dual port configurations with either mV, amplified analog or digital outputs. The sensor monitors pressure in industrial and medical applications by producing a voltage output that is linearly proportional to the input pressure.

### Features

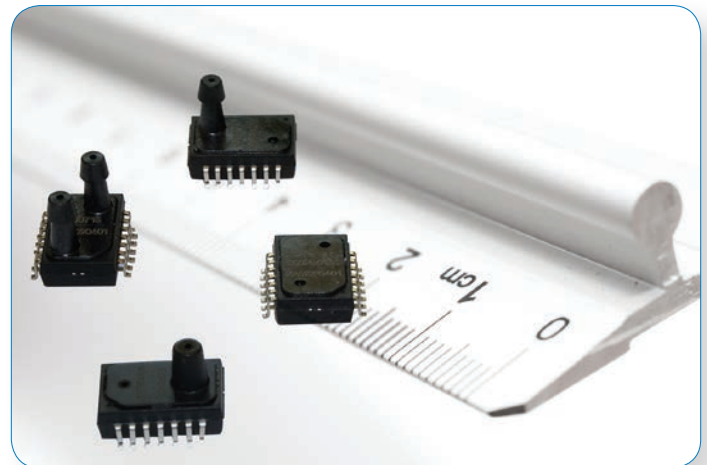
- Pressure ranges from 2" H<sub>2</sub>O (0.5 kPa) to 30 psi (200 kPa)
- **High stability and reliability Silicon MEMS chip with low long-term drift**
- Gauge, absolute and differential pressure variants
- **Up to 60 psi proof pressure**
- Rugged thermoplastic surface-mountable SOIC14 package
- Dual barb, manifold and no-port versions available
- Amplified Analog, Digital Serial (14-bit), Digital I<sup>2</sup>C, uncalibrated mV output options
- Total Error Band: ±1.5% FSO\*\*
- Operating Temp: -40°C to 125°C (-40°F to 257°F)
- Compensated Temp: 0°C to 60°C (+32°F to +157°F)
- Excitation Voltage: 3.3 and 5 VDC
- Custom transfer functions available

### Applications

- **Medical Equipment:** CPAP, medical respirators, ventilators, spirometers, anesthesia machines
- **HVAC Systems:** Air filter monitoring, room monitoring, duct measurements
- **Industrial Process Control:** Factory automation, leak detection
- **Avionics:** Altitude and airspeed measurements

\*\* Total Error Band (TEB) comprises Offset, Full Scale Span, Non-Linearity, Hysteresis, Non-Repeatability, all Thermal effects.

For 2" H<sub>2</sub>O, TEB is ±2.5% FSO



### Links to NPA Product Datasheets:

- [NovaSensor NPA | Surface Mount Pressure Sensors - Datasheet](#)
- [NovaSensor NPA | Low Pressure Surface Mount Pressure Sensors - Datasheet](#)
- [NovaSensor NPA | Pressure Sensor - Application Guide](#)