



NPI-19 Media-Isolated Digital I²C Pressure Sensors

The NovaSensor NPI-19 Digital I²C Pressure Sensor is a member of the NovaSensor NPI Series and incorporates state-of-the-art isolated sensor technology with I²C interface protocols, which gives the OEM user the best in price and performance.

These sensors are designed to operate in hostile environments while still providing the same outstanding sensitivity, linearity, and hysteresis of a silicon sensor. The piezoresistive sensor chip is housed in a fluid-filled cylindrical cavity and isolated from measured media by a stainless steel diaphragm and body.

The NPI product line offers a modular design that allows for a variety of pressure sensor port modules that are hermetically welded to the sensor header. These sensors monitor pressure in industrial, medical, and transportation applications by producing a voltage output that is linearly proportional to the input pressure. As with all NovaSensor silicon sensors, the NPI Series employs SenStable[®] processing technology, providing excellent output stability.

Features

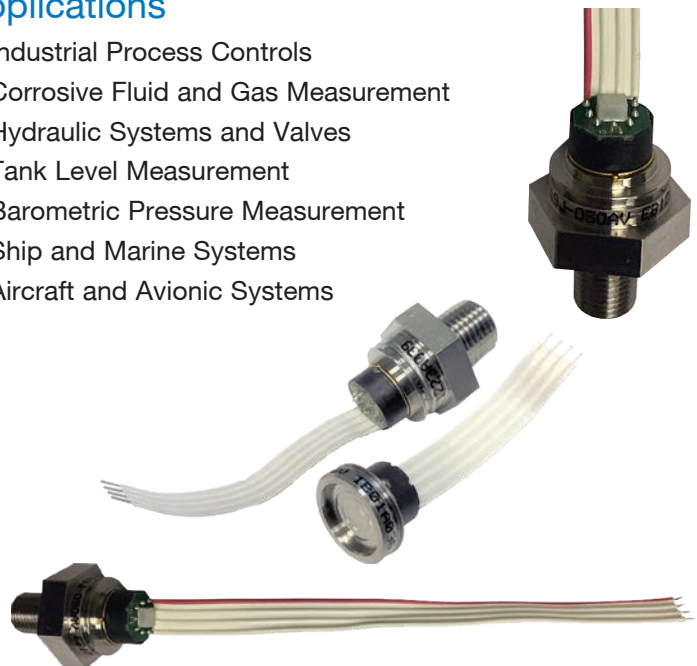
- No Port or Threaded Process Fittings
- Linearity: $\pm 0.25\%$ FSO (BFSL)
- Total Error Band: $\pm 1\%$ FSO
- I²C Interface Protocols
- 14-bit I²C Output
- Absolute and Gauge Pressure
- Pressure Ranges: 2.5 PSI (17 kPa) to 300 PSI (2068 kPa)

Specifications

Pressure Output	10% to 90% VDD
Device Address	I ² C (Addr 0x28H)
Supply Voltage	3.3V
Linearity	$\pm 0.25\%$ FSO
Total Error Band (TEB)	$\pm 1\%$ FSO
Over Pressure	2X
Burst Pressure	3X
Operating Temperature	-40°C to 125°C

Applications

- Industrial Process Controls
- Corrosive Fluid and Gas Measurement
- Hydraulic Systems and Valves
- Tank Level Measurement
- Barometric Pressure Measurement
- Ship and Marine Systems
- Aircraft and Avionic Systems



Additional Product Documents for Download:

- [NovaSensor NPI-19 I²C | Digital Pressure Sensor – Product Datasheet](#)
- [NovaSensor Application Spotlight | MEMS Pressure Sensor Solutions for Industrial Applications](#)
- [NovaSensor Product Spotlight | NPI Series of Media-Isolated Pressure Sensors](#)
- [Amphenol Advanced Sensors | Connecting Your World Through Sensing Innovations - OEM Product Catalog](#)

Amphenol NovaSensor is a leading innovator in advanced sensing technologies and embedded measurement solutions customized for a wide range of applications to provide critical information for real time decisions. We offer industry-leading application expertise, rapid customization and world-class manufacturing capability to deliver the greatest value to our customers.