



SmartPressure™

PRIMARY APPLICATIONS



Smartphones & Tablets

Bridge GNSS outage, provide terrain compensation inputs in various agricultural environments for equipment navigation, guidance, and positioning.



Wearables

Maintain blade and bucket position on bulldozers, excavators, motor-graders, etc. IMU data is coupled with GNSS to constrain position and bridge GNSS outage.



Drones, Robotics

Precision data enables the creation of HD surveys and maps, but also provides exact position for stabilization and location.



3D Geolocation

Industrial robots use motion data to enable automation, improve efficiency, monitor conditions via the precise motion and vibration measurements produced.

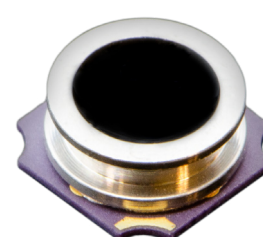
FEATURED PRODUCTS

ICP-20100



Ultra low power and highest accuracy pressure and temperature sensor ideally suited for mobile, geolocation, drones, and robotics.

ICP-10125



10 ATM waterproof pressure and temperature sensor ideally suited for wearable fitness monitoring and battery-powered IoT.

PRODUCT CATEGORIES

ICP-20100

Highest performance, lowest power
Barometric pressure sensor

- Integrated temperature sensor
- Ultra low noise at the low power (1.0 μ A at 1 Hz).
- Accurate measurement of 0.6 Pa or 5 cm height
- Temperature coefficient offset of 0.4 Pa/C

ICP-10125

Lowest height, waterproof
Barometric pressure sensor

- Integrated temperature sensor
- IPx8 waterproofing to 10 ATM
- Ultra low noise at the low power (1.3 μ A at 1 Hz).
- Accurate measurement of 1Pa or 8.5 cm height
- Temperature coefficient offset of 0.5 Pa/C

ICP-10111

High performance, low power
Barometric pressure sensor

- Integrated temperature sensor
- Ultra low noise at the low power (1.3 μ A at 1 Hz).
- Accurate measurement of 1 Pa or 8.5 cm height
- Temperature coefficient offset of 0.5 Pa/C

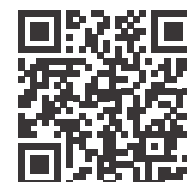
Development Kits

Comprehensive Development and
Evaluation Platform

- DK-20100, DK-10125
- Microchip G55 MCU
- Includes InvenSense MotionLink—a GUI-based development tool—and embedded Drivers
- Documentation and software at <https://invensense.tdk.com/smartpressure/#dev>

PRODUCT DETAILS

Product Number	Package (mm)	Waterproof	Range (kPa)	Digital Output	Supply (V)	Notes
ICP-20100	2 × 2 × 0.8 10-pin LGA	2000	16	I ² C, I ³ C SM , or SPI	1.2, 1.8, 3.3	NextNav™ Certified
ICP-10125	3.55 × 3.55 × 1.45 10-pin LGA	n/a	16	I ² C	1.8	IPx8, 10 ATM
ICP-10111	2 × 2.5 × 0.92 8-pin LGA	n/a	16	I ² C	1.8	NextNav™ Certified



Scan Here
for additional
materials and
information.