

Capacitive Pressure Sensor for Consumer Applications

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DPS310 is a BRAND NEW miniaturized Digital Barometric Pressure Sensor based on a unique capacitive sensing principle. It features ultra high precision, excellent accuracy, low current consumption and a small package.

Unique DPS310 features

- Ultra high precision $\pm 0,006\text{hPa}$ (equals to $\pm 5\text{cm}$)
- Relative accuracy $\pm 0,06\text{hPa}$ (equals to $\pm 0,5\text{m}$)
- Integrated FIFO to store 32 measurements
- Configurable for different use cases
- Low power: $3\mu\text{A}$ (1 measurement/s) Stand-by $<1\mu\text{A}$
- Operating range: $300 - 1200\text{hPa}$, $-40 - 85\text{C}^\circ$



Small package and low power consumption of the DPS310 makes it perfect for mobile and wearable devices

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The DPS310's ultra high precision and good accuracy combined with excellent temperature stability and a small package size make it the perfect device for mobile and wearable applications.

The DPS310 offers clear customer benefits

- Indoor navigation and sports applications benefit from high accuracy and precision
- Excellent temperature stability makes DPS310 immune to temperature changes inside a device
- Highly configurable for different use cases
- FIFO enables low system power consumption. Host processor can be powered down
- Small package and low power consumption makes it perfect for mobile and wearable devices



DPS310 can detect even individual steps

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Typical Applications

- Indoor navigation: floor detection e.g. in shopping malls and parking garages
- Outdoor navigation: GPS start-up time and accuracy improvement
- Health and sports: accurate elevation gain and vertical speed
- Dead-reckoning e.g. in tunnels
- Local weather stations

Indoor
Navigation



Outdoor
Navigation



Sports &
Activity



Weather
Station





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