

TPS – New low pressure sensors with I³C thanks to new ASIC

These new low-pressure sensors from AMSYS in Germany combine state-of-the-art pressure measurement cells with what is likely the most modern CMOS-ASIC for signal processing in an ultra-compact SOIC-16 package. The ASIC not only offers fast data reading via I³C but also advanced features such as pressure and temperature filters, interrupts, FIFO, software-specified addresses, and checksum queries to verify data integrity in memory and during communication.



TPS-Low sensor in 3 different versions

The relative and differential pressure sensors provide calibrated analog and digital output values with 24-bit resolution. The total error (TEB) in the compensated temperature range of -20 to 85°C is only +/-1 %FS.

The pressure connection to the SMD sensors is made via two vertical or horizontal connection ports. A version for integration into manifold blocks is also available. In addition to unidirectional relative and differential pressure measurements, the measurement of bidirectional and asymmetric pressure is also possible.

The I³C interface used is backward compatible with the proven I²C standard but offers significantly higher data rates that were previously only achievable with the more complex SPI. The TPS products are delivered by AMSYS in tape and reel from Germany.

Press Release

AMSYS GmbH & Co. KG



Title

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Applications

- CPAP / Sleep Apnea
- Ventilators
- Gas Flow Instrumentation
- Air Flow Measurement
- HVAC / VAV
- 3D-printing

Product Page

<https://www.amsys-sensor.com/products/pressure-sensor/tps-lp-low-pressure-sensor/>

The Company

AMSYS GmbH & Co. KG is a German company specializing in sensor technology, particularly pressure measurement. Its product range includes pressure sensors from 1.25 mbar to 800 bar, as well as humidity, temperature, and inclination sensors, along with wireless solutions. In addition to standard products, AMSYS offers custom adaptations to meet specific customer requirements.

Adress

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