Analog - Digitale
Mikromechanische
Sensorsysteme

# Miniaturized low pressure sensor (AMS 5812) with an analog output and I²C interface for the 5 to ±5 mbar range

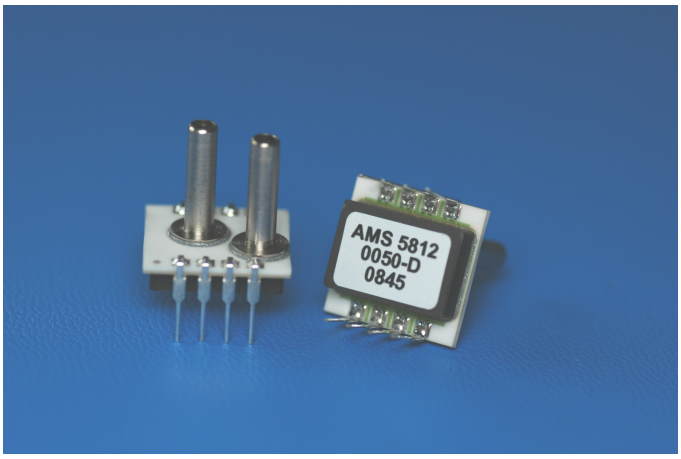
**AMSYS GmbH & Co. KG** (**http://www.amsys.de**) is extending its series of micromechanical pressure sensors (AMS 5812) with an analog output and I²C interface to cover the low pressure range.

During manufacture the offset and span are calibrated electronically and the temperature coefficients of the offset (TCO) and of the span (TCS) are electronically compensated for. Thanks to the internal signal correction feature an output signal of 4 V FS (0.5 to 4.5 V) is achieved with an accuracy of ± 1% FS below room temperature and a total error of ± 2.0% FS (accuracy across the entire temperature range). The output signal is ratiometric to the supply voltage, which can have a value of 5 V ± 5%.

The digitized pressure and temperature signal can be read out parallel to the analog output through an I²C interface. A starter kit is provided for this interface which allows easy installation of the AMS 5812 digital interface and which can be programmed with an individual I²C address.

The ready-to-use sensors are supplied for various pressure ranges of between 0.075 psi and 100 psi in absolute, differential, and relative pressure versions. It is also possible to measure negative and positive pressures with the AMS 5812 (bidirectional differential pressure readings of between ± 0.075 psi and ± 15 psi), where the offset is at 2.5 V and the full scale signal is ± 2 V.

Typical applications for AMS 5812 include medical technology, domestic engineering, fill level sensing, barometric altitude measurement, and flow metering.




**Contact** **info@amsys.de** **or ring +49 (6131) 469-8750**