Digital Differential Pressure Sensors with Low Power Consumption

Sensirion recently launched new differential pressure sensors in the SDP600 series. The new SDP6x6 sensor line features especially low energy consumption, making it suitable for long-term battery operation. The SDP606 and SDP616 sensors are designed to enter sleep mode after performing each measurement. They wake up when a “measure” command is received and enter sleep mode again af-ter completing the measurement. The operation currents of a standard SDP600 sensor can be high as 6 mA, but the new SDP6x6 sensor is optimized for operating currents no greater than 400 ?A. There is virtually no current drain (<1 ?A) in sleep mode.
This drastic reduction in power consumption allows the new sensors to be used in battery powered applications. The new differential pressure sensors are excellent solutions for medical and HVAC applications, where high accuracy and reliability with very low energy consumption are required.

The new sensors extend the comprehensive product range of Sensirion’s digital differential pressure sensors in the SDP600 series. Along with the other products in this series, they offer a digital I2C output and are fully calibrated and temperature compensated. Thanks to the principle of calorimetric flow measurement, CMOSens® differential pressure sensors achieve outstanding sensitivity and accuracy even at very low pressure differences (<10 Pa). Furthermore, they have very high long-term stability and are free from zero-point drift. Like all devices in SDP600 series, the new sensors are available in two different versions. The SDP606 is intended for direct threaded connection to a pressure manifold with O-ring sealing, while the SDP616 is designed for tube connection.

Website: www.sensirion.com/sdp6x0 [1].

Source URL (retrieved on *04/24/2014 - 8:11pm*):
http://www.mdtmag.com/product-releases/2011/11/digital-differential-pressure-sensors-low-power-consumption

Links:
[1] http://www.sensirion.com/sdp6x0