

Precision Amplifier Family Enables Low Input Voltage Noise



National Semiconductor Corporation introduced two precision operational amplifiers (op amps) that offer the industry's lowest input voltage noise and highest accuracy for products operating at low frequencies and low supply voltage, according to the company. Target applications include industrial and scientific weight scales, pressure sensors and other low ohmic sensor systems. The LMP7731 single and LMP7732 dual precision op amps provide low input voltage noise of 2.9 nV/sqrt Hz with a 1/f noise corner of only 3 Hz. They also feature 0 Hz to 10 Hz peak-to-peak noise voltage of 78 nVpp. This ensures highly accurate signal conditioning, while minimizing distortion in low-frequency (near DC) sensor applications. The new LMP precision op amps are built on the company's proprietary VIP50 BiCMOS process technology. The VIP50 process allows National to design higher-performance precision op amps, along with the most power-efficient, low-voltage amplifiers on the market. The amplifiers supports data acquisition systems of 16-bits or greater. In these high-resolution data acquisition systems, the designer commonly scales the output of a sensor to the full-scale input of an analog-to-digital converter (ADC) to ensure optimum sensitivity. Available now and priced in 1,000-unit quantities, the LMP7731 is \$1.15 and the LMP7732 is \$1.80.

National Semiconductor Corporation
800-272-9959, www.national.com [1]

Click here for more information on the the LMP7731 :
<http://www.national.com/pf/LM/LMP7731.html> [2]

Click here for more information on the the LMP7732 :
<http://www.national.com/pf/LM/LMP7732.html> [3]

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