# PC/104 A/D and D/A Modules Operate from -40° to +85°C Without Requiring Calibration

Two new, low-cost PC/104-compatible analog I/O cards were announced recently by WinSystems. The PCM-MIO-G-AD-1 is a 16-channel, 16-bit analog input card and the PCM-MIO-G-DA-1 is an 8-channel, 12-bit analog output card. Both cards also support 48-lines of digital I/O.

These small, 90 mm x 96 mm expansion boards are designed to meet customer requirements for accurate analog and digital I/O over a -40° to +85°C temperature range. They are designed for industrial, medical, security, transportation, and Mil/COTS applications.

Based upon Linear Technologies' precision converters and voltage references, these cards do not require calibration which results in quick, easy setup; plus it eliminates the necessity for readjustment and recalibration to installed units in the field.

The input ranges for the PCM-MIO-G-AD-1 are 0 to 5V, ±5V, 0 to 10V and ±10 volts. Two independent, 16-bit A/D converters support up to 16 single-ended or 8 differential channels or various combinations of both. The conversion speed is 100K samples/sec. The PCM-MIO-G-DA-1 has eight independent, 12-bit D/A converters on board. The output voltage ranges are 0 to 5V, 0 to 10V, ±5V, and ±10V. All output channels are programmable and can be updated and cleared individually or simultaneously.

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