

Why instruNet Is Better Than Data Acquisition Boards

Application Note #108, 12/18/2002

- #1** instruNet provides Universal Screw Terminals that Directly attach to Thermocouples, Thermistors, RTDs, Strain Gages, Load Cells, Accelerometers, Potentiometers, Voltage Sources, Resistance Sources, & Current Sources.
- #2** instruNet provides independently programmable Digital Filters (LP, BP, BS, HP), Analog Filters (LP), integration times, voltage input range, and sample rates for each channel.
- #3** instruNet allows placement of the A/D close to the sensor and away from the noisy computer.
- #4** Absolute Accuracy is specified, as is done with all Volt Meters (e.g. $\pm 2V$ range is specified as being accurate to $\pm 1mV$). Data acquisition boards don't do this because the sum of all errors, including cable cross-talk and ground loops, are frightening. For more information, download "16pg Comparison Report" at www.gwinst.com/pdf-docs/Report.pdf.
- #5** instruNet offers optional low cost optical isolation, to reduce noise with low level signals.