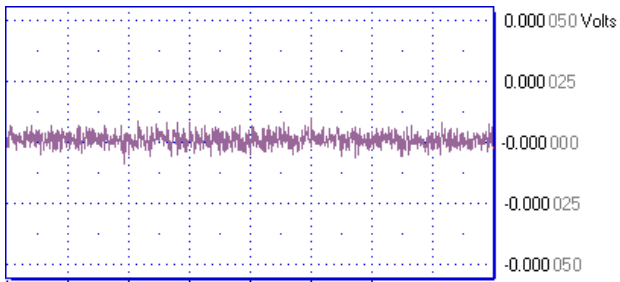


# Miniature USB Data Acquisition System

Measure Volts, Ohms, Amps, RTD, Thermocouple, Strain Gage, Load Cell.



- Connect Windows computer directly to sensors: Volts, Resistance, Current, Thermocouple, RTD, Thermistor, Strain Gage, Load Cell, Pressure, LVDT, Flow and Accelerometer.
- instruNet i60x provides 16se/8di Voltage Input Channels with *extremely* accurate 24-bit A/D Converter<sup>29</sup>. Alternatively, one might consider the larger i555 card cage with 8 to 256 channels.
- Voltage input ranges:  $\pm 20\text{mV}$ ,  $\pm 40\text{mV}$ ,  $\pm 80\text{mV}$ ,  $\pm 150\text{mV}$ ,  $\pm 300\text{mV}$ ,  $\pm 600\text{mV}$ ,  $\pm 1.2\text{V}$ ,  $\pm 2.5\text{V}$ ,  $\pm 5\text{V}$ ,  $\pm 10\text{V}$ .
- 4x Digital I/O (4mA sink/source, 0 to 3.3V).
- i60x receives power from USB bus and provides excitation power (+3.3V, 80mA) to sensors.
- Includes Free instruNet World strip chart recorder software; or purchase powerful PLUS version.
- Compatible with Windows  $\geq$  XP SP3 computers, 32-bit or 64-bit.
- The i601 is the smallest and most accurate electrically-isolated 8channel direct-to-sensor data acquisition system in the world.
- For full i600/i601 datasheet, click here.
- For i60x accuracy specifications, click here. Why so accurate? It was designed in 2016; whereas many competing products are older.
- The i601 tiny standalone USB device provides  $\pm 36\text{V}$  bank electrical isolation; whereas the less costly i600 directly connects I/O signal ground to computer ground via USB cable.
- Digitize at a maximum sample rate of 160K samples/sec for 1 channel, 12Ks/sec/ch for 2 channels, 6Ks/sec/ch for 4 channels or 3Ks/sec/ch for 8 channels.



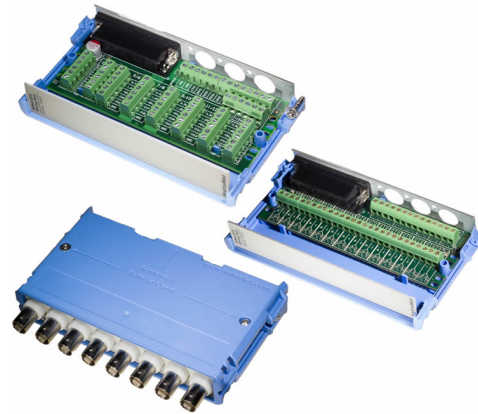
Very low internal noise, as shown above ( $2\mu\text{Vrms}$ ,  
1Ks/sec,  $\pm 20\text{mV}$  range)



Compatible with Excel, LabVIEW, DASYLab,  
MATLAB, Origin, C & Visual BASIC on Windows ≥  
XP SP3 Computers



*i60x* can digitize concurrently with *instruNet i555*  
card cage system; which supports 4, 8, 12 or 16  
slots of analog/digital i/o hardware.



Optional Wiring boxes:  
*i510*, *i511*, *i512*

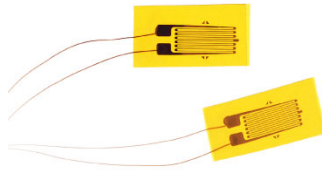
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# Connect to Sensors in Several Easy Steps

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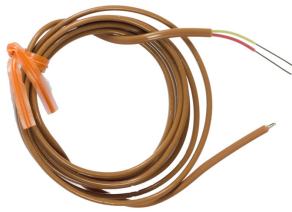
Connect to Load Cell  
in several easy steps



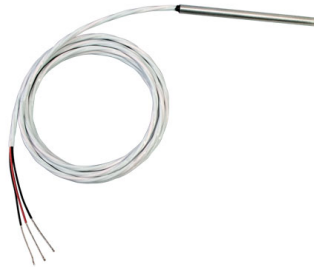
Connect to Strain Gage  
in several easy steps



Connect to Pressure sensor  
in several easy steps



Connect to Thermocouple  
in several easy steps



Connect to RTD  
in several easy steps



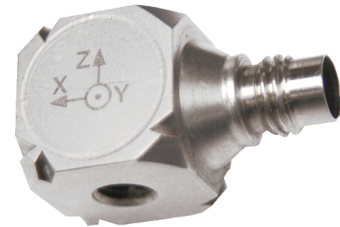
Connect to Thermistor  
in several easy steps



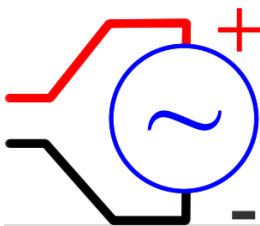
Connect to LVDT distance sensor  
in several easy steps



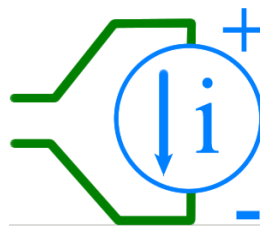
Connect to Flow sensor  
in several easy steps



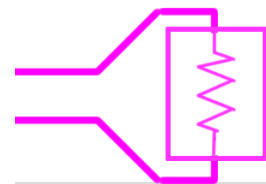
Connect to Accelerometer  
in several easy steps



Connect to Voltage Source  
in several easy steps



Connect to Current Source  
in several easy steps



Connect to Resistance Device  
in several easy steps