## ITC-1600

## 16 bit Multi-channel Data Acquisition System



ITC-1600-2: dual rack version shown

Instrutech Corporation is proud to present the ITC-1600 expandable 16 bit data acquisition system. The ITC-1600 system comprises of at least one I-1600 rack unit and a PCI-1600 computer interface. Each I-1600 rack unit has multiple 16 bit A/D and D/A converters digitizing at 200 kHz each and isolated digital I/O. Each PCI-1600 host interface card supports two rack units. Data from multiple PCI-1600 host interfaces is synchronized.

The ITC-1600 system utilizes the newest fiber optic technology and a Digital Signal Processor to create a state of the art, low noise, isolated data acquisition system. The Fiber optic link provides superb optical isolation, virtually eliminating ground loops, and increases the distance between the computer and the recording setup to 5 meters. Unlike conventional electrical cables the fiber optics does not emit any electromagnetic radiation. The DSP is used to further improve the ITC-1600 noise performance.

## I-1600 rack unit features

- Four synchronous 16 bit D/A converters
- Two synchronous 16 bit A/D converters, each multiplexed into four differential inputs
- Four 12 bit "telegraphing" A/D inputs
- Thirty-six synchronous digital output channels, four with LED indicators
- Twenty synchronous digital input channels
- All channels are optically isolated


## PCI-1600 computer interface features

- Bus mastering PCI host interface
- Supports two I-1600 rack units
- Phase-lock loop for synchronization of multiple PCI-1600 cards in a single or multiple computer configuration


## Software support

- Windows C/C++ drivers, Instrutech ECELL, Heka Pulse, Wavemetrics Igor Pro, National Instrument LabVIEW, and Mathworks MATLAB. MacOS driver under development.

