vibDaq

vibration monitoring systems

LabVIEW-based Vibration Solutions

vibDaq
continuous monitoring

vibDaq Continuous Monitoring

Designed to view, log and analyze vibration data from rotating machinery

Plots generated from live or logged data in floating windows
- View any number of Waveform, FFT, Waterfall, Bode, Polar, Orbit, Shaft Centerline, Trend and Tabular Summary plots

Event-based data logging, with buffer for pre-event recording
- Automatically stream time domain data to disk based upon user-defined triggers

Easy-to-use configuration dialogs
- Save your data acquisition, logging, limit checking and view settings to configuration files

Remote client operation
- View live data being acquired on another system across your network

Integration of process data between test systems
- Send and receive data using OPC

Utilization of hardware and software from National Instruments
- COTS hardware is reliable and low-cost (NI PXI-4472B and NI PXI-7833R)
- LabVIEW®-based application utilizes advanced toolkits for even-angle resampling and order tracking
- Modular code base can be customized to meet the specific needs of your application

FPGA-based smart tachometer processing
- Automatically adjust to input signal characteristics in real time
- Samples tachometer waveforms at 200ks/sec for enhanced phase resolution

Supported probe types include:
- Proximity probes (radial vibration, thrust position)
- Accelerometers (with IEPE provided)
- Velocity probe
- Optical tachometer
- Other (any voltage output sensor within the input voltage range)

specifications

Hardware

Vibration Channels	8 to 48
Tachometer Channels	8
Acquisition Rate	Up to 102.4 kHz per channel
Acquisition Method	Simultaneous
Analog to Digital Resolution	24 bits
Input Ranges	$\pm$10 volts or $\pm$31.6 volts
Input Coupling	AC or DC
IEPE Power	Software selectable per channel
Antialiasing Filter	Yes
Sensor Connections	SMB (SMB to BNC Cables Provided)