

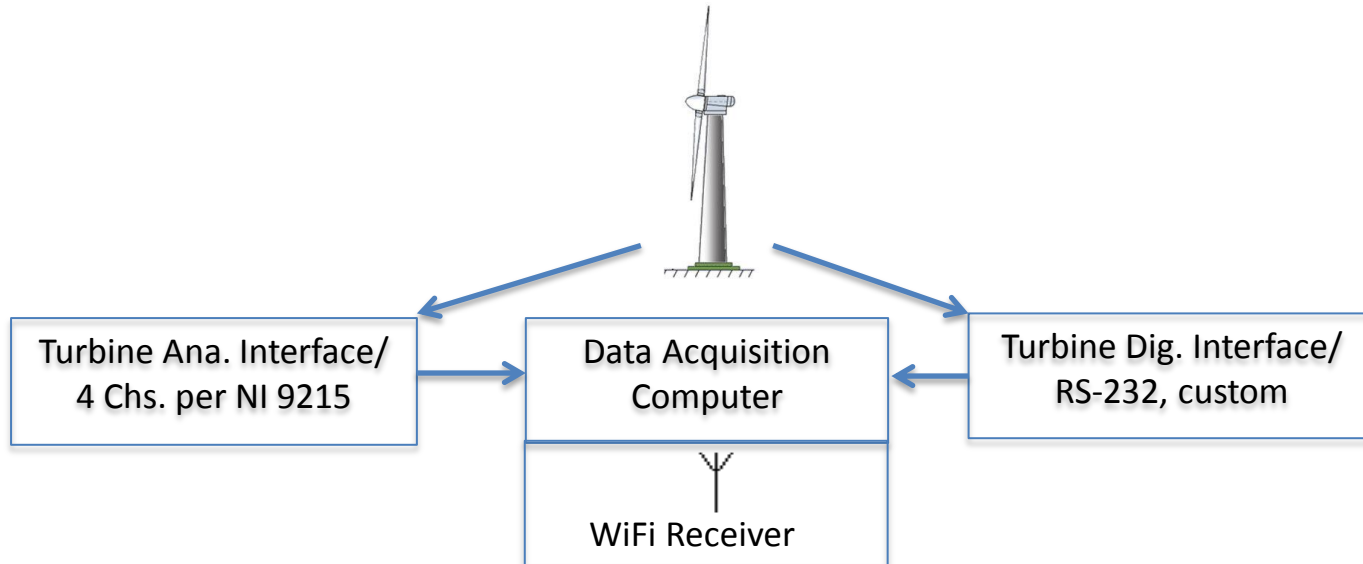


We help ideas meet the real world

DELTA noiseLAB Wind System

Hardware

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Microphone Digitizer 2 or 4 Chs. per NI 9215*	WiFi Transmitter
Met. Analog Interface/ 4 Chs. per NI 9215	WiFi Transmitter

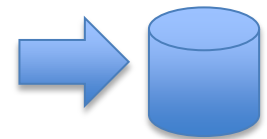
Multiple Microphone or Met Stations possible.



Software

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	IEC 61400-11 Tone Analysis	
	Data Validation Sound Power/Level	Measurement Uncertainty Calculation
PC Windows XP-Win7	noiseLAB Wind Data Acquisition	noiseLAB Pro ISO 1996 Annex 3 Tone



Results:

- Excel Tables
- .jpg Graphs
- .tdms waveforms

Configuration Info

- Turbine analog interface
 - Up to four analog channels per module (NI USB-9215)
 - AC, DC, or Frequency Pulse train
- Turbine Digital Interface
 - RS-232, 485: Standard driver for some Vestas and Siemens Turbines.
 - Custom drivers for other interface types and turbine types.
- USB or WiFi Connections to Data Acquisition Computer

Microphone Station

- Microphone, pre-amp
- Primary, Secondary Wind Screen, Ground Board
- Digitizer (NI USB-9234) two to four channels
 - (two channels if microphone pre-amp with gain)
- Wi-Fi or USB connection.

Met Station

- Met Mast analog interface
 - Up to four analog channels per module (NI USB-9215)
 - AC, DC, or Frequency Pulse train
- USB or WiFi Connections to Data Acquisition Computer

PC

- PC
 - Laptop or Desktop acceptable.
 - Windows XP to Windows 7
 - 1600 x 1280 Screen
 - I5 Processor 2 GHz, 8 Gbyte RAM, 500 GB disk
 - High channel count: Inquire about configurations
 - SSD Disk and USB 3 External Disk for higher capacity, speed
 - Clean PC without excess software to ensure real time performance. Inquire for details.

Basic Software

- Microsoft Office 2010 or later.
- Internet Explorer
- National Instruments NI-DAQ (provided by DELTA)

Applications Software (1)

- noiseLAB Wind
 - Data acquisition of acoustic, met, and turbine data
 - Wind Binning
 - FFT, Sound Level, and 1/3 octave analysis
 - Saves raw waveforms as .tdms
 - Save analysis results as delimited text and Excel files

Applications Software (2)

- Data Validation/Sound Power/Sound Level
 - Data validation
 - Listen, View spectra of analyzed blocks
 - Remove invalid blocks (due to unwanted signals)
- Compute Sound Power and Sound Level to IEC 61400-11
- Output results to Excel.

Applications Software (3)