



## VIBpoint™ Framework 2.1

The VIBpoint Framework application adds real-time analysis features to DT9837 and DT8837 vibration test systems. The VIBpoint Framework application provides continuous and re-triggered data acquisition, records data to disk, and analyzes the acquired data using single-channel and two-channel FFT functions. The software is navigated through a series of easy-to-use configuration windows, allowing flexible selection of the desired acquisition, processing, plotting and display parameters.

### Acquire

- Discover and select supported devices
- Configure all input channel settings for the attached sensors, such as the enable state, IEPE settings, input range, tachometer edges, counter edges, and engineering units for the sensor
- Load/save multiple hardware configurations
- Simultaneously acquire data from all selected channels on each connected device
- Log acquired data to disk, file can be opened later for further processing

### Analyze

- Perform single FFT (Fast Fourier Transforms) operations on the acquired analog input data, including Spectrum, Autospectrum, and Power Spectral Density
- Perform two-channel FFT operations, including: Frequency Response Functions (Inertance, Mobility, Compliance, Apparent Mass, Impedance, Dynamic Stiffness or custom FRF) with H1, H2, or H3 Estimator types, Cross-Spectrum, Cross Power Spectral Density, Coherence, and Coherent Output Power
- Frequency domain data can be displayed as Amplitude, Phase, or Nyquist Plot
- Configure and view statistics about the FFT data, including the frequency and dB value of the highest peaks
- Open recorded data in Excel for further analysis
- Time domain data can be displayed as acquired and/or after windowing
- Linear and Exponential Averaging Types are supported along with RMS (Real), Vector (Complex) and Peak Hold Averaging Modes

## Display

- Customize many aspects of the signal display to suit your needs, including row/column configuration, colors, fonts, custom header annotation, signal overlay etc.
- Display acquired and processed data in real-time during acquisition.
- Any processing parameters can be changed post-acquisition and the results are immediately calculated and displayed
- Export data as Comma or Tab Delimited Text, or in Universal File Format, and export display window to a variety of graphics file formats

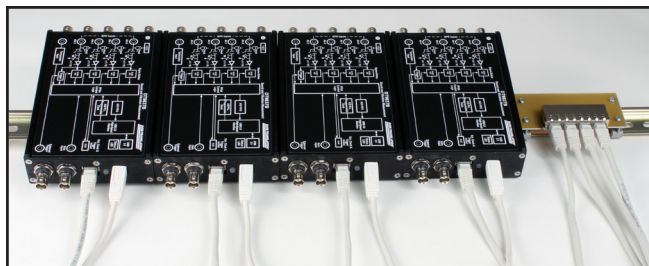
## Modes of Operation

The VIBpoint Framework application offers two operating modes:

- Acquisition mode – Acquire analog input, tachometer, and/or counter data. This mode requires use of at least one of the supported Data Translation data acquisition devices. In this mode, monitor acquired data without logging it to disk, or record the acquired data to disk.
- File reader mode – View a previously recorded data file. In this mode, analyze the data, repeatedly, using different single function or two-channel FFT functions, as desired.

## Licensing

The VIBpoint Framework application is available as a 14-day trial version. Once you start the software, you have 14 consecutive calendar days in which to try the features of the application. When the 14-day trial period has elapsed, you must purchase a license key from Data Translation to continue using the VIBpoint Framework application.



Using USB modules provides maximum flexibility in industrial locations. Shown is the VIBpoint-DT9837B modules on a DIN rail with patch panel.



VIBpoint-DT8837 front panel with BNCs for direct connection to IEPE sensors. This Ethernet configuration can be stacked (4U, 1/2 rack, as shown) or rack-mounted with instrument modules in a 2U, full rack.

## Supported Devices

- Up to 16 synchronized DT8837 Ethernet modules connected together using the Trigger Bus
- Up to 4 synchronized DT9837A, DT9837B, or DT9837C USB modules connected together using the RJ45 connector
- One DT9837 USB module

Model	Interface	Analog Inputs	Resolution	Sample Rate	Digital I/O	Counter/Timers and Tachometer	Analog Outputs
DT8837	Ethernet	4-16*	24-bit	Up to 52.7 kHz	●	●	●
DT9837	USB	4-16	24-bit	Up to 52.7 kHz	—	●	—
DT9837A	USB	4-16	24-bit	Up to 52.7 kHz	—	●	●
DT9837B	USB	4-16	24-bit	Up to 105.4 kHz	—	●	—
DT9837C	USB	4-16	24-bit	Up to 105.4 kHz	—	—	●

\*ISO-Channel