eZ-Analyst™

Real-Time Vibration & Acoustic Analysis Software

Compatibility: ✔ WaveBook ✔ ZonicBook

Features

- **Real-time FFT analysis**
- **Easy-to-use graphical user interface provides fast setup**
- **Field expandable from 8 to 56 channels**
- **Supports four separate tachometer channels**
- **View all functions simultaneously in eight display windows with up to 16 data overlays in each window**
- **Export your data to Excel, ME Scope, SMS Star, or UFF type 58 ASCII or Binary**
- **Wide selection of real-time analysis features, including integration/differentiation synchronous averaging, and much more**

eZ-Analyst™ software from IOtech adds real-time continuous and transient data acquisition in the frequency domain to the ZonicBook/618E™ and WaveBook™ systems. Today's eZ-Analyst is the compilation of over 10 years of software development and customer inputs that results in the most versatile structural vibration analyzer available.

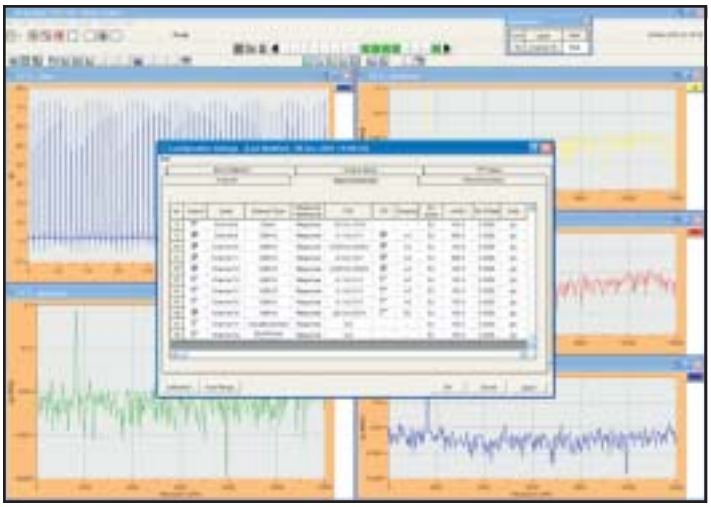
eZ-Analyst is operated through a series of easy setup windows that display only the information important to your test. Acquisition configuration involves selection of the desired acquisition parameters from easy-to-use menus.

The ZonicBook with eZ-Analyst system is a complete vibration data acquisition and analysis package

Configuration

eZ-Analyst features a familiar Windows®-style graphical user interface, making it easy to configure the hardware with simple fill-in-the-blank configuration screens. Selectable hardware parameters include channel selection, channel type (either response or reference), range, auto-ranging, triggering, and more. Configurations can be saved and recalled for future use, making it simple to change from one test to another.

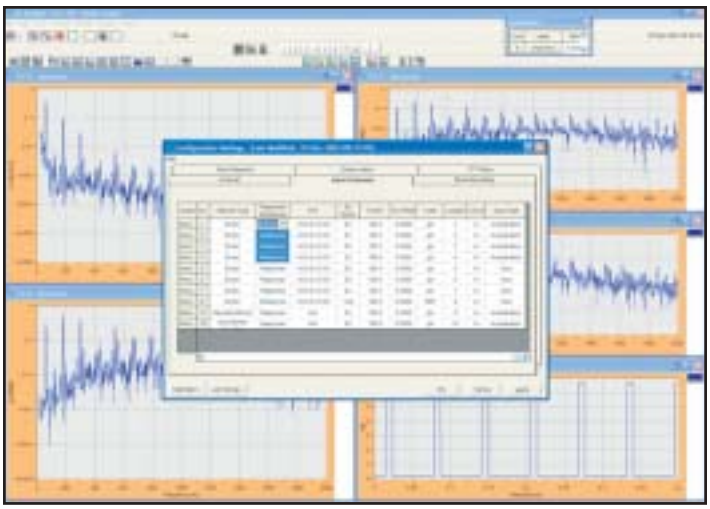
The Analyzer's acquisition setups are quickly configured



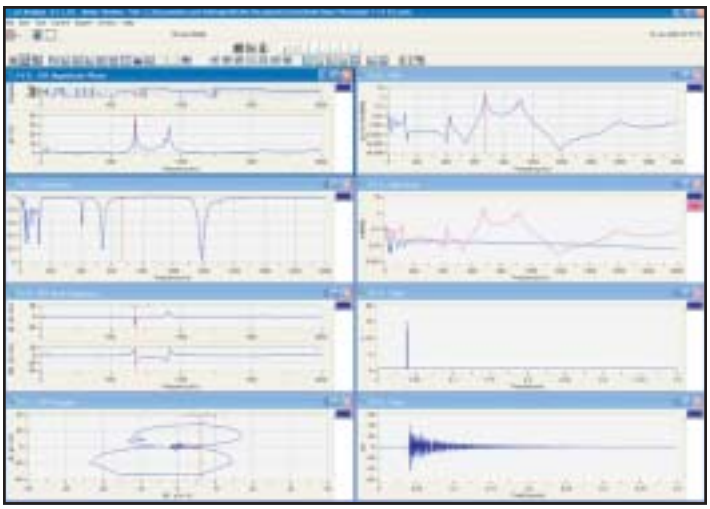
The Instrumentation Grid provides ease-of-use features for input channel setups

eZ-Analyst™

General Information



Any active channel can be set as either response or reference for MIMO data acquisition



The user has complete control over each display window for unparalleled display flexibility

Windowing. eZ-Analyst includes Hanning, Blackman Harris, Flat Top, Exponential with variable decay, and no window for response channels. Additionally, Rectangular and Cosine Taper Windows are provided for reference channels.

Averaging. Linear, Exponential, Peak Hold, and Time Synchrous

Resolution. eZ-Analyst offers resolution from 64 to 25600 Spectral lines

Frequency Range. From DC up to 200 kHz*

Sample Rate. User selectable from 2.56, 5.12, or 10.24 times the frequency range selected to help in acquiring that elusive transient

Channels. Minimum of 8 to a maximum of 56 in increments of 8

Triggering. Any active channel may be used as an acquisition trigger, which is adjustable on level, slope, and pre or post delay as a percentage of the time window

Tachometer. Four independent inputs for RPM measurements

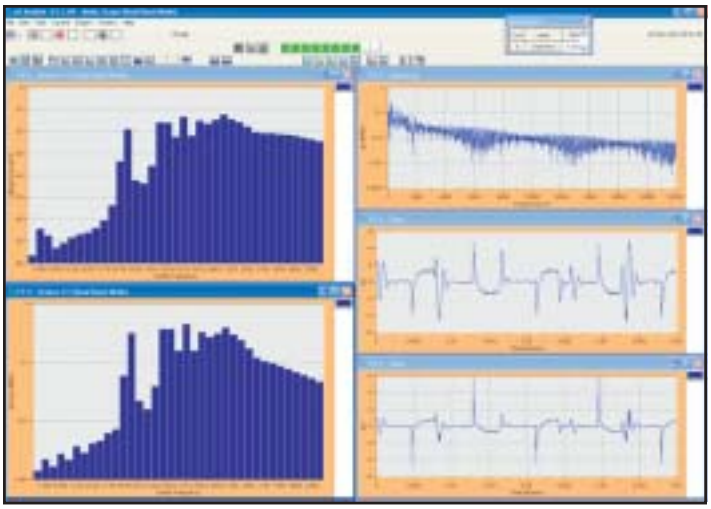
MIMO. Any number of active channels can be set as reference channels making MIMO (Multi Input Multi Output) testing easy and convenient

Display

eZ-Analyst allows the user to establish any combination of displays up to a maximum of 8 separate display windows and 16 data traces within each window for unparalleled versatility. Each display set up can be saved for instant recall providing the user with unlimited display flexibility.

Display Windows. Up to 8 with 16 data traces per window in either real-time or post analysis

Functions. Available display functions include Time, Spectrum, Power Spectrum, PSD, FRF (Magnitude, Phase, Real, Imaginary, Nyquist), Cross Spectrum, Coherence, Octave, Third Octave, Transfer Function (Inertance, Mobility, Compliance, Apparent Mass, Impedance, Dynamic Stiffness), and Averaged Time

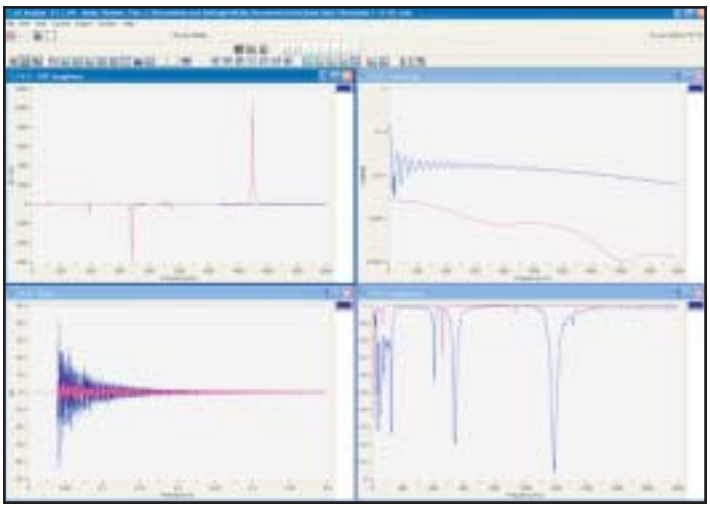


Real-time octave and one-third octave at the same time as high-resolution narrow band data

* Maximum bandwidth determined by number of active channels and sample rate.

eZ-Analyst™

General Information & Ordering Information



Triggered and average measurements provide spectral resonance analysis

Record continuous time domain data to the hard disk for post analysis

Cursors

All cursors are selectable as independent of display window or locked for automatic tracking of frequency.

Single. Cursor displays Time or Frequency with amplitude and overall amplitude

Dual. Cursors display Time or Frequency with band overall

Harmonic. Displays fundamental and harmonics with the number of harmonics user selectable; harmonic markers have fine tuning

Side Band. Displays center frequency with ± delta frequency

Peak. Displays peak amplitudes with user-selectable number of cursers; user-selectable threshold level sorted by amplitude or frequency

Free Form Markers. User-selectable number of markers that can be placed at any location on the data display

Export Data

UFF. Universal type 58 ASCII or Binary

ME Scope Modal. Vibrant Technologies ME Scope native format

STAR Modal. Spectral Dynamics STAR native format

EXCEL. Microsoft Excel®

Overlay Data

Previously acquired data may be overlaid with new data while the new data is being acquired.

Record/Playback Data

eZ-Analyst allows the user to record real-time data to the computer hard drive while viewing the data. The data is saved on the computer hard drive as a contiguous time data file and can then be played back and analyzed. The acquisition hardware does not have to be connected to the computer to perform this function. Data can be recorded at maximum bandwidth, and the file size is only limited by the available space on the hard drive. During playback, all display functions are available to the user.

Ordering Information

Software

Description	Part No.
Real-time vibration analysis and recording software for the WaveBook and ZonicBook operating under all 32-bit versions of Windows®	eZ-Analyst

Note: eZ-Analyst is included with the ZonicBook/618EZA package.

Related Products

Hardware	
WaveBook	p. 17
ZonicBook	p. 59
Software	
eZ-Rotate	p. 66
eZ-Rotate*Plus*	p. 66
eZ-TOMAS	p. 68
eZ-Balance	p. 72
eZ-NDT	p. 73
eZ-FrequencyView	p. 241