ALERT RTA™ - REAL TIME ANALYZER

ALERT RTA™ ADDS NEW POWER TO YOUR DCX™, DCA-60™, OR SPRITE™ WITH REAL-TIME, FOUR-CHANNEL SIMULTANEOUS DATA ACQUISITION AND CROSS-CHANNEL CAPABILITIES.

ALERT Real Time Analyzer (RTA) software provides tools for troubleshooting and enables the advanced features offered by the Azima DLI data acquisition hardware. With ALERT RTA, the full capability of simultaneous, four channel narrowband data collection is realized. In addition to spectrum and waveform collection, ALERT RTA provides advanced measurement techniques such as transfer functions, coherence and cross-power spectrum.

Each of the four input channels can be independently configured for different transducer types, units or signal conditioning. Cross-channel measurements can be collected for channels 1-3 relative to the 4th channel. Users can configure triggered measurements or long time captures. Many different measurements can be displayed in the multi-document interface and update simultaneously as data are collected, to give the look and feel of a real-time analyzer.

ALERT RTA can be installed on your desktop computer. In this type of installation, ALERT RTA will not be able to collect data, but will fully function as a viewer of data collected by the portable data collectors.



Using ExpertALERT's "User Defined Point" feature, special tests performed using RTA can be associated with machinery in your condition monitoring program and are accessible from the ExpertALERT tree. Click on the test and ALERT RTA (in viewer mode) will open up and display the appropriate data.

ALERT RTA readings can be exported into ASCII and Universal File Format (UFF) for input into Operating Deflection Shape (ODS) software such as ME Scope.

Supported data types:

- Time Domain (Up to 41 KHz sample rate)
- Long Time Capture (Capture events lasting from 6.4 seconds to 54.6 minutes)
- Spectra (25,600 maximum lines resolution max frequency range of 16 KHz)
- RMS (Overall), DC, Speed, 1X Amplitude / Phase
- Triggered measurements
- Transfer Function, Coherence, Cross Power
- Envelope Demodulation
- Bump Test
- Modal Analysis
- Time Synchronous Averaging



SPECIFICATIONS

Data Collection

- Continuous
- One-time

Spectral Analysis

• Spectra: 50 – 25,600 lines

• Frequency range: 31 – 16,000 Hz

Long Time Capture

- Up to 102,400 samples
- 80 to 40960 Hz sample rate

Window Types

- Hanning
- Hamming
- Flat Top
- Rectangular

Averaging

- Time or Frequency domain
- Linear, Exponential, Peak-hold
- Overlap processing: 0-75%

Inputs

- 4 channel simultaneous
- Auto-range: Selectable per channel
- Cable fault check: Selectable per channel
- ICP sensor power: Selectable per channel
- DC coupling: Selectable per channel
- 0.2 Hz HP filter: Default, Selectable per channel
- 10 Hz HP filter: Selectable per channel
- Analog integrator: Selectable per channel
- Selectable gain: 1X, 10X (before or after integrator stage), 100X

Triggering

- Selectable channel source
- Trigger format: Edge or Level
- Trigger level: Enter in Engineering Units
- Trigger delay: Up to 5 minutes
- Pre-trigger delay: Up to 100% of frame size
- Trigger slope: Selectable

Demodulation

Filters: 7 selectable bands from 1250 to 10000 Hz

Instrument Compatibility

- DCX
- DCA-60
- DCA-50B
- SpriteMAX (includes AQ216 multiplexer support)

Data Collection Options

- Time Waveform
- Amplitude Spectra
- Cepstrum
- Demodulated Spectrum
- ISO 2954 Overall RMS
- DC Value
- 1X Amplitude / Phase
- Orbit plot
- Tachometer speed
- Coherence
- Transfer function
- Cross-power spectrum

Data Export

- ASCII (delimited)
- Universal File Format (UFF) version 58

Graphical Analysis

- Harmonic cursor
- Sideband cursor
- Reference cursor
- Zoom
- Flag Peaks
- Convert units

Specifications are subject to change without notice



Realize the full analytical power of DCX and DCA-60 with ALERT RTA

