AZIMA DLI DCX™ DIAGNOSTIC DATA COLLECTOR / REALTIME ANALYZER
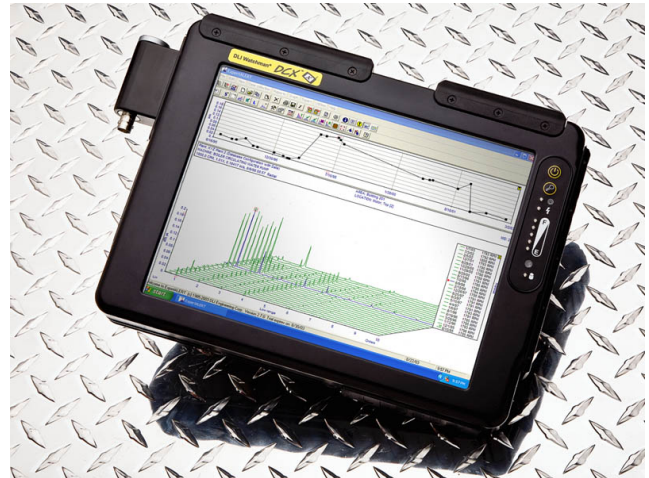
POWER, FLEXIBILITY and INTELLIGENCE DIFFERENTIATES DCX™ FROM TRADITIONAL VIBRATION DATA COLLECTORS AND PROVIDES YOU COMPLETE FREEDOM OF YOUR DESKTOP PC.

TOTAL MOBILITY IN YOUR PLANT

Introducing the Azima DLI DCX, a rugged four-channel vibration data collector specifically suited for modern machine condition analysis. Unique to DCX is its embedded ExpertALERT™ condition monitoring software system, machine historical database and automated machine diagnostics all bundled into a rugged Windows® XP handheld device:

- Perform machine condition analysis, including bearing fault detection using demodulation.
- Balance equipment in the field with optional Balance software.
- Perform advanced cross-channel analysis with optional ALERT Real Time Analyzer.
- Utilize software and functions normally available only on your desktop work station. Bring your important applications and documents into the field with you.
- Communicate via Ethernet or Wifi.

DCX's patented architecture brings your entire condition monitoring database into the mobile environment. Where multiple DCX and desktop Azima DLI ALERT™ systems exist, machine data is automatically replicated through an innovative database technique that is transparent to the user. Whenever the mobile DCX unit is connected to the network by Wi-Fi or Ethernet, new data will automatically update all other DCX and networked ALERT systems. It's this functionality that makes competitive route-based data collectors obsolete.

EFFICIENT AND ACCURATE DATA COLLECTION

Tri-axial, simultaneous data collection combined with Azima DLI's field-proven methodology means you can collect repeatable and complete data in less time. With DCX's point and click user interface, quickly select another machine or location to test. When a machine test is done, review the entire ensemble of machine data, compare current and previous data and review the automated diagnostic results within moments of completing the machine test.

![AZIMA DLI - Knowing What's Ahead]

STANDARD FEATURES

- Embedded ALERT analysis software
- Triaxial displays including FFT, waveforms, orbits, phase, waterfall and overall levels
- Premium (5%) triaxial accelerometer for efficient data collection of multiple axes/directions
- Run-up / coast-down measurements
- Detect roller bearing faults using envelope demodulation
- Orbit displays for detecting sleeve bearing faults
- Simultaneous three-channel data acquisition (4 channels with optional ALERT RTA software)
- Transfer data via USB cable or thumb-drive
- Microsoft® Windows® XP Tablet operating system
- Bright SVGA color display
- 802.11 a/b/g wireless networking
- Integrated Ethernet and USB ports
- Port replicator
- Certified for European Market (CE)

OPTIONS

- Soft or armored integral cable for accelerometer
- Multi-plane field balancing software (ALERT Multiplane Balance)
- Advanced signal analysis software (ALERT RTA)
- Stroboscope / tachometer
- Laser or infrared optical tachometer
- Current clamp for motor current measurements
- Infrared thermometer
- 4-Channel BNC input adapter
- Foreign language support
- ALERT database replication

SPECIFICATIONS

Digital Signal Processing

- Embedded DSP for rapid data collection
- Simultaneous sampling of all four inputs up to 41 KHz
- Anti-aliasing via an analog RC filter plus a 64th order digital FIR filter
- Overall RMS amplitude detection from 10 Hz to 1 kHz

Spectral Analysis

- Four channel, simultaneous FFT up to 16 kHz fmax
- FFT Resolution up to 25,600 lines
- Spectral Windows: Hanning, Hamming, Flat-top and Uniform
- Averaging types: spectral or time-synchronous,
- Overlap processing; selectable overlaps of 0 - 75%

Time Domain Analysis

- Filtered or unfiltered orbit plots
- Crest factor
- TTL-level tachometer input

Analog Signal Processing

- Dynamic range greater than 85 dB
- Signal to noise ratio greater than 76 dB
- Selectable DC, 0.2 Hz or 10 Hz high-pass analog filtering
- Selectable single stage analog integration
- No more than -76 dB inter-channel crosstalk
- +/- 10 VAC input range (+/- 25 VDC)
- Cable fault check

Physical

- Size: 11.1" x 8.5" x 1.8"
- Weight: 5.3 lbs including battery
- Fully machined metal enclosure
- Scratch resistant display cover glass

Processor / System Memory

- Intel® Core Duo™ processor – 1.2 GHz
- 1 GB RAM

Video Display and Digitizer

- 10.4" 800x600 transmissive LCD color display
- Electromagnetic digitizer
  - More than 1000 dpi resolution
  - Proximity sensing pen with right mouse button

Mass Storage

- Standard 80-GB rotating hard drive
- Optional 16-GB solid-state hard drive
- ALERT Sybase SQL database

Power Consumption & Battery Life

- 2 1/4 hours continuous data collection
- 6 hour battery life with power management
- ACPI power management support
- Battery fast charge from empty in 2 hours
- Universal AC power adapter 110-250 volts, 50-60 Hz

Environmental Specifications

- Ingress protection: IP-65 against dust and water spray
- Operating temperature: -20°C to 50°C
- Storage temperature: -40°C to 70°C
- Shock: 4-foot drop
- Vibration: MIL-STD 810F 514.5 procedure I, Category 4

Applicable International Standards

- Electrical Safety: EN 60950-1:2001 (1st Edition)
- Electromagnetic Emissions: ICES-001:2006 Class A, EN 61326-1:2006 Class A, FCC 15.109:2007 Class A
- Electromagnetic Immunity: EN 61326-1:2006

Specifications are subject to change without notice

CE