

TRIO™ 8-SERIES

CX8 DIAGNOSTIC DATA COLLECTOR / EXPERT ANALYZER
 CA8 VIBRATION DATA COLLECTOR / FIELD ANALYZER



Data collection never looked so good.

Durable, powerful, and lightweight, the new TRIO™ 8-Series vibration data collectors feature a thin 10" tablet controller giving users more visible area while in the field.

Part of the TRIO Family of vibration instruments, the CX8 and CA8 brings additional flexibility to your condition based maintenance program. With its modular design, TRIO uses a separated data acquisition device to connect to an adaptable line of tablet user interfaces.

The CX8 and CA8 series of vibration data collectors and diagnostic instruments use a lightweight 10" touchscreen tablet controller which offers tremendous portability while still maintaining a durable standard expected in today's industrial environments.

FEATURES INCLUDE

- Tough and bright 10.1" multi-touch or stylus controlled display with durable Corning® Gorilla® Glass
- Lightweight with high performance. Weighing only 2.2 pounds (1kg) the 8-series offers a seven hour battery
- Dual core Intel processor for fast performance and best available battery management
- Document findings with 3.0 megapixel rear-facing camera or 1.3 megapixel front-facing camera.
- TRIO's Bluetooth® modular integration with the TRIO DP-1 acquisition device for the safest in-field operation
- Offered with a 2-year accidental damage protection for total piece of mind in your plant's environment

TRIO 8-series data collectors are durable with an IP-52 environmental rating. These controllers are capable of handling most industrial areas. Conveniently carried over the shoulder, in a courier bag, or in a hard transit case, the CX8 or CA8 are ready to join your PdM program.

Loaded with **Genuine Windows® 7 Professional**, this controller can be connected to your network or operated as a stand-alone instrument.



LIGHTWEIGHT AND DURABLE, THIS 10.1" HD TABLET IS COMFORTABLE TO CARRY THROUGHOUT YOUR ENTIRE WORKDAY.

TRIO is portal-enabled. The CX8 and CA8 are ready to be connected to the **Azima DLI WATCHMAN Reliability Portal™** for the best enterprise visibility for your condition based maintenance program.

When safety and performance are important, the experts turn to the Azima DLI's TRIO data collection instruments.

For more information on TRIO™ please visit www.AzimaDLI.com

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SPECIFICATIONS*

SYSTEM OVERVIEW

- Triaxial vibration data collector
- Industrial Windows® 7 Professional tablet PC controller
- Wireless, modular-designed data acquisition unit (DP-1)
- Optional handheld laser tachometer
- Flexible carrying options
- CX8 includes embedded ExpertALERT™ (no host software required)
- CA8 includes embedded ALERT™ onboard analysis software (requires hosted ExpertALERT, StandardALERT™, or WATCHMAN Reliability Portal™)
- Sybase 12 SQL database engine
- Survey File Transfer Exchange or optional ALERT replication for synchronization over multiple devices or ALERT systems
- Battery life up to seven hours on the controller
- Ergonomic design for efficient and safer use over traditional data collectors
- 4-plane machine in-place balancing and advanced analysis options available

USER INTERFACE / DURABLE TABLET CONTROLLER

Physical

- Size: 10.9" x 7.06" x 0.62" (277mm x 179mm x 16mm)
- Weight: 2.2 lbs (1 kg)

Environmental

- Operating: +5C to +43C; 8% to 80% RH (w/o condensation)
- Storage: -20C to +60C; 8% to 90% RH (w/o condensation)
- Altitude: sea level to 15,000 feet

Durability

- MIL-STD-810G drop spec to 4'
- IP52 rated; water, dust, splash resistant
- SSD storage
- Corning® Gorilla® glass
- Aluminum-alloy internal frame

Processor/Operating System

- Intel® Atom™ N2600 Dual Core processor (1.6 GHz)
- 2 GB, 1333MHz DDR3 System Memory
- 64 GB Solid State Drive (SSD), SATA 2.0 at 3.0Gb/s
- Genuine Windows® 7 Professional (32-bit)

Battery¹

- Internal Lithium-Ion battery with 43Whr capacity
- Battery capacity: up to 7 hours
- Battery charging: 2 hours(4:1 work-to-charge ratio)
- 65W universal charging adapter (100-240V, ~1.5A, 50-60Hz)

Communication

- Wireless LAN 802.11 (a/g/n)
- Integrated Bluetooth® 4.0

Inputs / Outputs

- Capacitive multi-touch screen
- Stylus input
- 1 USB port
- 1 Micro-HDMI (Type D) Video Out
- 1 SD Card
- Power jack
- Rear-facing 3.0 megapixel built-in camera
- Front-facing 1.3 megapixel built-in webcam
- Dock Connector
- Mono Speaker & Dual Array Mics with Noise Cancellation
- Combined Audio In/Out jack
- 10.1" Wide (LED backlit, 1366x768) Dual Bonded Display

TRIO DATA ACQUISITION / PROCESSOR (DP-1)

Inputs

- 4 simultaneous sampled, fully phase matched, ICP programmable
- Other Coupling - AC (for proximity probe connection)
- AC Input Voltage Range - $\pm 5V$
- AC Bandwidth 0.5Hz to 40kHz
- DC Bias/Gap Measurement - $\pm 25V$ range for ICP bias voltage check and proximity probe gap measurement
- Measurements - Acceleration, velocity (by h/w integration), bearing demodulation (all from accelerometers), and displacement (from proximity probes)
- Gain Ranges - Gain steps 1, 2, 5, 10, 20 and 50
- Digital trigger input - External trigger, tachometer speed, ordered data (by phase-lock-loop)

Processing

AC Measurements

- ADC - 24-bit sigma-delta, simultaneous on four AC channel inputs, better than 104 dB dynamic range
- Sampling Rates - 64Hz to 102.4kHz
- Bandwidth Ranges - 0.5Hz-25Hz to 0.5Hz-40 kHz, protected by anti-alias filters
- Data Block Lengths - 64 to 400,000 samples
- Spectral lines - Up to 25,600
- Noise Floor - Less than 0.2 μ -volts per root Hz from 0.5-1000 kHz

DC Measurements

- ADC - 16-bit multiplexed for bias voltage, process, and probe gap measurements, 0-10 kHz Bandwidth

Analysis Capabilities

- Dynamic Analysis - Overall, Spectra, Waveform, Phase & Speed
- Cross-Channel - Cross-power, Transfer Function, Coherence, Phase and Magnitude
- Demodulation Function - Digital amplitude demodulator and Impact Demodulation for low speed detection
- Averaging - RMS, Exponential, Peak Hold, Order Tracking, Synchronous Time and Negative Averaging
- Number of averages - 1-1000
- FFT Window Function - Hanning, Hamming, Rectangular, Flattop

Communications with Host Tablet PC/Controller

- Wireless - Bluetooth v2.0 with EDR (1.5Mbps max), backward compatible to Bluetooth v1
- Interface Port - USB user port (includes data stream and remote power to DP-1)

Power

- Charging rate - 0.5A from USB PC input (4 hrs)
- Battery Life¹ - 8 hours between charges

Physical

- Dimensions - 15cm (6.0") x 9cm (3.5") x 4cm (1.5") approx Weight - 450g
- Operating Temperature - -10°C to +60°C (14°F to +140°F)
- Sealing - IP-65, 4' drop, 95% humidity per MIL-STD-810G
- Compliance - CE, RoHS
- Carrying options - Belt worn holster or shoulder worn soft pack

*Specifications are subject to change without notice

¹ Battery life varies by configuration, application, features utilized, and operating conditions. Maximum battery life decreases with time and use. Battery life estimated by average use.