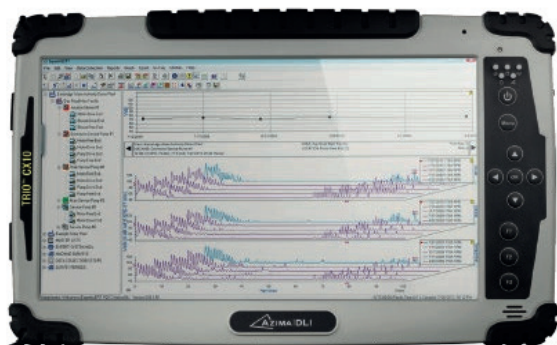


TRIO CA10 with StandardALERT™: Portable vibration monitoring system with triaxial accelerometer



The StandardALERT™ has all the necessary features what make it a professional spectral analyzer.

DP2 Data Processor module

4 simultaneous sampled, fully phase matched, ICP programmable .TRIO™ recognizes that computer technology is rapidly changing. Its distributed system configuration allows the tablet PC component to be replaced or upgraded for a small fraction of the cost of replacing a traditional vibration data collector. It communicates with the controller tablet via bluetooth.

Userfriendly interface

The TRIO™ line of data acquisition products includes the powerful, Windows OS industrial tablet computers. TRIO uses a robust Bluetooth® connection and includes a solid state hard drive, bright sunlight readable touch screen and Wi-Fi access allowing TRIO to communicate with your desktop or networked PCs and servers. TRIO's user interface provides you more capabilities, better ease of use, and allows you to bring your other Windows PdM and Office productivity applications into the field.

Lower Cost and Flexibility of Ownership

TRIO™ recognizes that computer technology is rapidly changing. Its distributed system configuration allows the tablet PC component to be replaced or upgraded for a small fraction of the cost of replacing a traditional vibration data collector.

Ergonomy, reliability and safety above all

There is no safer vibration data collector on the market. TRIO's ergonomic design allows more efficient and safer use of the data collector around dangerous and difficult to access machinery. Machines can be tested from safe and secure distances from rotating machine locations using the integral Bluetooth® communication. Its modular design helps keep technicians hands-free and untethered from the machine for improved safety.

Limitless solution for Industrial applications!

- Spectrum and Time Waveform analysis (up to 25 600 lines)
- Automated peak search algorithm: harmonics, normalisation and side bands, forcing frequencies
- Envelope analysis
- Orbits, filtered orbits analysis
- Bode plots
- Nyquist diagram
- Demod Spectrum, Impact demod
- Cepstrum analysis
- FFT window functions: Hanning, Hamming, Rectangular, Flattop
- Run-up – Coast-down: Spectral waterfall, Bode-Peak & Phase, Peak Hold
- Simultaneous data acquisition
- Time synchronous sampling
- Speed measuring on channel 4. (or other process parameter)
- Unique measuring range: 0,5 Hz – 40 000 Hz
- It is modular so you are able to upgrade the system (if you would like to buy a new controller tablet for example)
- Triaxial sensor, sensibility: 100 mV/g
- StandardAlert™ analyst software with User friendly interface
- 10" touch screen is readable even in strong sunlight



VIBRATION DATA COLLECTOR / FIELD ANALYZER

SPECIFICATIONS*

SYSTEM OVERVIEW

- Triaxial vibration data collector
- Industrial Windows® 7 Ultimate tablet PC controller
- Wireless, modular-designed data acquisition unit (DP-1)
- Optional handheld laser tachometer
- Flexible carrying options
- CX10 includes embedded ExpertALERT™ (no host software required)
- CA10 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 six hours on the controller, 12 hours with extended option
- 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: 10.8" x 6.7" x 1.2" (275mm x 177mm x 32mm)
- Weight: 2.9 lbs (1.3 kg)

Environmental

- Operating: -20C to +60C; Storage: -40C to +60C
- Humidity: Spec to MIL-STD-810G, Method 507.5
- Altitude: 15,000 feet at 23C

Durability

- MIL-STD-810G (516.6, IV) drop spec to 4'
- IP65 rated; water, dust, water protection
- SSD storage

Processor/Operating System

- Intel® Atom™ N2600 Dual Core processor (1.86 GHz)
- 4 GB DDR3 System Memory
- 64 GB Solid State Drive (SSD), SATA 2.0 at 3.0Gb/s
- Genuine Windows® 7 Ultimate (32-bit)

Battery1

- Hot-swappable Lithium-Ion battery: 38.5 Whr capacity
 - Battery capacity: up to 6 hours
- Optional Extended-life battery: 77Whr capacity
 - Battery capacity: up to 12 hours
- 80W charging adapter (100-240V, 2.5A, 50-60Hz)

Communication

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

Inputs / Outputs

- Resistive single-touch screen
- Stylus input
- 2 USB ports: 1 waterproof 2.0, 1 standard 2.0
- 1 waterproof 9-pin RS-232 port
- 1 waterproof VGA Video Out
- 1 microSD Card
- 1 RJ-45 10/100/1000 LAN
- Waterproof Power jack
- Speaker, Audio / Microphone jack
- 4+1 Navigation / Directional keys, 3 user-programmable buttons
- Rear-facing 5.0 megapixel built-in camera
- On-screen QWERTY soft keyboard
- 10.1" Wide (LED backlit, 1366x768) Display

*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.

TRIO DATA ACQUISITION / PROCESSOR (DP-1, DP-2)

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-Channel1 - Cross-power, Transfer Function, Coherence, Phase and Magnitude
- Demodulation Function - Digital amplitude demodulator and Impact Demodulation or 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 Life - 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

