

TRIO® 8-inch Controller

TRIO C8



- ✓ LIGHT
- ✓ PORTABLE
- ✓ 3-year WARRANTY

The TRIO® C8 is right size for a long day.

The TRIO 8-inch controller maintains a light and rugged ergonomic style with exceptionally long battery life to get through a long day in the harshest plant environments.

The 8" tablet is designed to fit comfortably in one hand! The **TRIO C8 is less than 2 lbs. and less than 1" thick**, with a concave, non-slip case that makes it easy to grip. The brilliant 8.1" capacitive-touchscreen is incredibly rugged with minimal glare and has four advanced touch modes for rain, gloves, pen, and digitizer operation.

With **Window® 10 Professional** installed, you are ready to connect the TRIO Controller to your network or operate as a stand-alone device, supporting your productivity applications and multiple language options.

TRIO is **PredictivePortal™**-enabled and ready to connect to the Symphony Industrial AI hosted, Eureka AI Platform for simplified database synchronization infrastructure and unparalleled program visibility.

FEATURES INCLUDE

- ✓ 8.1" LCD Capacitive Touchscreen with digitizer stylus pen, rain-mode or glove-mode operation
- ✓ 12-hour standard battery, plus optional 8-hour SnapBack add-on battery packs
- ✓ Powerful Intel® Atom™ Processor, 4GB RAM and 128 GB solid-state drive (SSD)
- ✓ Bluetooth® integration with TRIO DP-2 / DP-2H acquisition hardware for safe in-field collection
- ✓ 3-year inclusive warranty on TRIO Controller
- ✓ **Optional Class 1, Division 2 HAZLOC** approval when paired TRIO DP-2H acquisition hardware
- ✓ **Optional Total TRIO®** database hosting, cloud application, web portal reporting, business-level metrics and analytical second opinions

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SYSTEM OVERVIEW

- Triaxial vibration data collector
- Industrial Windows 10 Professional 64-bit (CBB) tablet PC controller
- Wireless, modular-designed data acquisition unit (DP-2/DP-2H)
- Optional handheld laser tachometer
- Safe, flexible carrying options
- ALERT™ Data Collection Application
- Optional embedded Expert Automated Diagnostic System
- Survey File Transfer Exchange or optional ALERT replication or WATCHMAN Sync Utility for synchronization over multiple devices or ALERT systems
- Optional 4-plane machine in-place balancing and advanced analysis options

USER INTERFACE / DURABLE TABLET CONTROLLER

Physical / Environmental / Durability

- Size: 8.93" x 5.94" x 0.94" (227mm x 151mm x 24mm)
- Weight: 1.94 lbs (0.88 kg)
- Operating: -21C to +50C; Storage: -51C to +71C
- Humidity: 95% RH, non-condensing
- Rugged per MIL-STD-810G
- IP65, IEC 60529 rated; water, sand, and dust protection
- Class 1, Division 2, Group A, B, C, D, T6 per UL/ANSI/ISA 12.12.01

Processor/Operating System

- Intel® Atom™ x7-Z8750 1.6 GHz Processor
- 4 GB LPDDR3 system memory, 128 GB Solid State Drive (SSD)
- Genuine Windows 10 Professional CBB (64-bit)
- TPM v2.0 data security; NIST BIOS compliant

Battery

- Lithium-ion standard battery: 7.4V, 4200 mAh capacity
- SnapBack 2nd battery Life: 14.4V, 2100 mAh

Communication

- Wireless-AC 7265, 802.11 ac
- Integrated Bluetooth v4.0

Inputs / Outputs

- 8.1" Capacitive touchscreen, 1280x800 resolution
 - IPS TFT LCD HD, 600 NITS, LumiBond® 2.0 sunlight readable
 - Digitizer Pen, Rain Mode, Glove Mode
- USB 3.0 port
- Micro-HDMI
- DC power input port
- Speaker, audio / microphone combo-jack
- 6 button keypad (power, volume up, volume down, home, P1, P2)
- Rear-facing 8.0 MP built-in camera with autofocus
- On-screen QWERTY soft keyboard

Carry Options

- Belt-worn holster and palm strap
- Optional 4-point harness
- Optional shoulder strap

TRIO DATA ACQUISITION / PROCESSOR (DP-2/DP-2H)

Data Acquisition Inputs

4 simultaneous sampled, fully phase matched, ICP programmable
Other Coupling: AC (for proximity probe connection)
AC Input Voltage Range: $\pm 10V$
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 hw integration), bearing demodulation (accelerometers), and displacement (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: 0.5–25Hz, 0.5–40 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 and 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)
Wired: USB user port (includes data stream and remote power to DP)

Power

Charging rate: 0.5A from USB PC input (4 hrs.), 1.0A from USB wall adapter
Battery Life: 8 hours between charges (continuous collection)

Physical / Environmental / Durability

Dimensions: 6.18" x 3.62" x 1.81" (157mm x 92mm x 46mm)
Weight: 1.0 lb. (450 grams)
Carrying options - Belt worn holster or shoulder worn soft pack
Operating Temperature: -10C to +60C
IP-65 rated; water, sand, and dust protection
4' drop per MIL-STD-810G
0 ~ 90% humidity per MIL-STD-810G
Compliance: CE, ETL Listed, Optional: Class 1, Division 2, Group A, B, C, D, T6