



## Complete Turnkey Analyzer System

The BTPZ-1553 is a complete turnkey 1553 analyzer system for the lab, flight line, and field test, simulation and maintenance operations. The BTPZ-1553 is a Dualos integrated, Windows based, application solution for of MIL-STD-1553/1760 A and B network test, analysis and simulation.

BTPZ-1553 harnesses the hardware power of Abaco Systems' multifunction R15-EC ExpressCard interface, a highly rugged, high performance customized Durabook Z14i series system, Abaco's powerful BusTools 1553 analysis, simulation and test software and cables for immediate use with no user hassles around interrupts, driver conflicts, and other integration issues.

Presented by a powerful 1000nits sunlight readable display, the BTPZ-1553 system easily brings the intuitive GUI interface into plain site for mouse or touch-screen interactive monitoring, multi-display of real-time engineering unit values and user formatted graphs for simplified control over simulation, display, data logging, playback and protocol analysis.

Additional features include bus analysis, on-the-fly create/modify messages, simultaneous multiple bus control, injecting/detecting errors and rapid filtering of displayed or recorded data for both live and replay modes.

BusTools 1553's Selective Data Watch feature provides for high/low limit checking, real-time engineering unit display, DDE output, graphic displays, automatic limit event logging and a snapshot feature. Selective Data Watch can save hours when tracking down elusive system problems.

Dualos BTPZ-1553 systems are optimized for live battery swapping, include I/O card protection and are wireless and camera free (maybe included by special request.)

Other rugged systems are available including rugged tablet formats and single and multi-protocol ARINC 429, ARINC 664, and Mil-Std-1553 units. Encrypted, custom Windows and Linux systems available upon request.

## Features

- 1 or 2 Dual Redundant 1553 Channels.
- Supports 1553A, 1553B, and 1760 Networks
- 100% Simultaneous Monitor, Archive, Simulate and Emulate on up to 8 Channels
- Simultaneous Real-time Multiview:
  - Sequential Monitor,
  - Aircraft layout
  - Selective Data Watch
  - Charts and Gauges
- Full Simultaneous Multi-function Operations: BC, 31RT, and BM
- Extensive Hardware & Software Triggers
- Bi-directional avionics discretes
- Transformer coupling
- IRIG-B synchronization In/Out
- Fixed output voltage
- Tablet or Laptop Extremely Rugged System
- Mil-Std-810 & 461 Certified
- Available in Tablet or Notebook Design
- Expandable to Supports Add-on Channels

## Applications

- Lab, Field, and On-Platform Test
- LRU and Bus Design/Test
- Data Loading and Production Test
- Engine Test Stands
- Integration Test
- Missile Launch Tests
- Operational Analysis
- Systems Simulation and Test
- Field Maintenance Test & Simulation
- On Platform Simulation and Analysis

## Benefits

- Mobile Analyzer & Test System
- Reliable and Dependable
- Long System and Support Life
- Easy to Use in Lab and On Platform
- Highly Reliable, Lower Damage Risk
- All in One System Easier to Procure
- RoHS/EPEAT Compliant
- VPAT ACR Available

# Abaco BT-1553 Analyzer/Simulator GUI

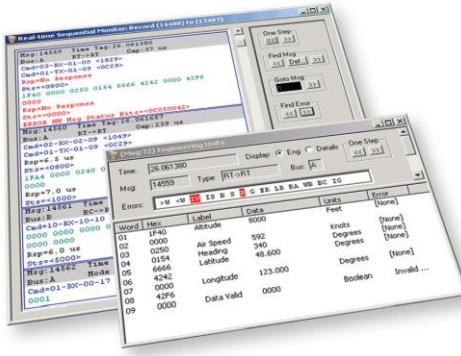


Fig 1 Real-time Sequential & Data Select Views

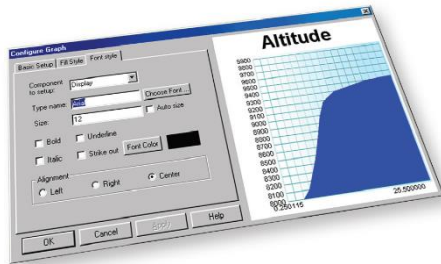


Figure 1 Real-time and Historical Charting

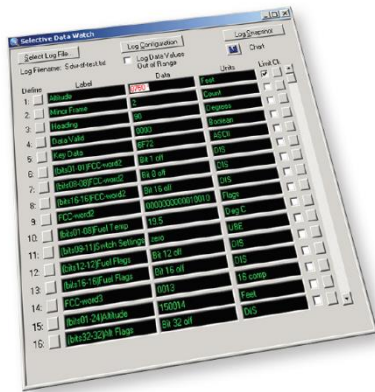


Figure 3 Real-time Selective Data Limits

### Bus Analysis

- Analyze 1553 bus protocol activity
- At-a-glance Bus Activity Screen
- Detailed display of message status, errors, data
- Inject/detect errors at the message and word levels
- IRIG/GPS synchronization capability. IRIG B decode optional.
- Graphical “Topology” representation and icon controls for customized bus schematic layouts, ease of use and trouble shooting of cables/ transformer connections

### GUI Features

- Full BC, 31 RT and monitor capability
- Graphical or ASCII file setup of BC and RT simulations
- Multiple real-time data displays
- Log 100% of bus traffic on multiple channels to disk and/or memory
- Three levels of simultaneous data logging
- Selective Data Watch™ for multiple parameters
- ASCII file import/export of Engineering Unit (ICD) definitions
- Major/Minor frame BC simulation
- Conditional branching on message data

### Flexible Real-time Data Displays

- Quickly create multiple, concurrent displays
- Engineering units with labels
- Simplified filtering
- User-formatted charting – real-time and historical

### Advanced Archive and Playback

- Log 100% of bus traffic on multiple channels to disk and/or memory
- Three different simultaneous logging features
- Pre and post processing filtering of data to word count
- Multi-level event triggering
- Real-time bus playback with RT edit mode
- PAT – Parallel Analysis Tool displays multiple views of archived data

### System Integration– Selective Data Watch

- Real-time display of individual data words from any network message
- Designed for interactive use
- Quick selection of up to 64 data words with no programming
- Upper and lower limit bounds notification
- Out-of-limit log file with snapshot feature

### Network Simulation

- Simulate all or part of your network
- Modify simulated data while running through Windows DLL
- Intuitive, interactive operation
- Major/Minor frame Bus Controller architecture
- Graphical, icon-based GUI programming
- Conditional BC branching
- Simple ASCII file formats for BC, RT and EU (ICD) definitions. Full ASCII conversions for archived data - allows easy export to spreadsheet applications.

### Analyzer Connections

- Transition cabling provided via robust 36- pin Champ type connector with mechanical retention
- 1553 data bus, triax style connectors and DSub I/O connector
- Transformer coupling; Fixed output voltage
- Input and output triggers
- Two bi-directional avionics discretes
- IRIG-B synchronization In/Out (AM or DC/TTL)

### Rugged Notebook Host Features

- Intel i7, 16G RAM, 256G SSD, W10/64bp
- 14”, 4 level touch, Sunlight readable display
- Backlit keyboard and DVD
- Mil-Std-810 & Mil-Std-461 Certified
- 6’ drop and IP 65 Certified
- TPM 2.0, NIST BIOS compliant; PW Protected
- Size: 14.01 in (L) X 11.02 in (W) x 1.97 in (H)
- Weight: 8lbs.
- Operation Environment Temp: -20°C to 60°C
- Storage Environment Temp: -40°C to 71°C
- Hot Swappable Long-lasting Battery Pack
- AC adapter : 100-240V, 50Hz-60Hz, 65W
- 3-Year Accidental Damage Warranty

### Ordering information

#### BTPZ-1553 Notebook Analyzers

- BTPZ-1553-G2-1MW - 1 Channel 1553
- BTPZ-1553-G2-2MW - 2 Channel 1553

#### BTPU-1553 Tablet Analyzers

- BTPU-1553-G2-1MW - 1 Channel 1553
- BTPU-1553-G2-2MW - 2 Channel 1553



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