Mobile DAQ System
Product Data Sheet

Powerful and compact, the Mobile DAQ System from Bloomy Controls is a versatile data acquisition system that handles a variety of high-channel count, high-acquisition rate applications.

Features

- High channel count
- Simultaneous, synchronized high- and low-speed sampling rates
- Configurable amplification, filtering, excitation
- BNC, MS, and TC quick connects
- User-friendly operator interface with real-time graphical data display
- More economical than VXI- and VME-based systems

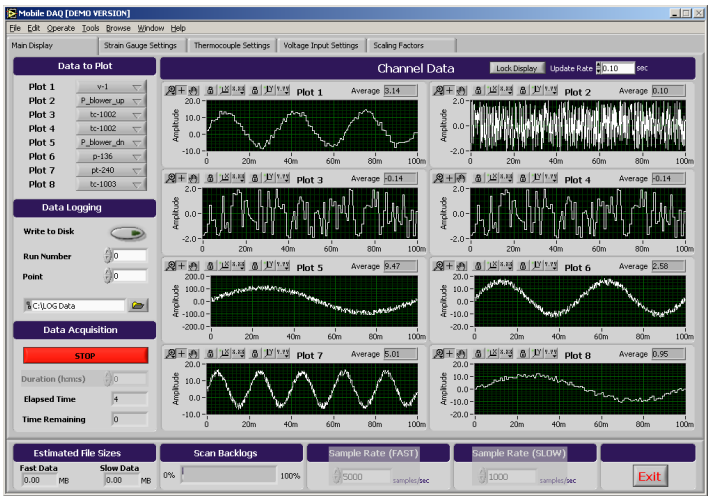
Applications

- Engine performance
- Vibration and acoustic profiling
- Structural analysis
- Thermal modeling
- Machine conditioning diagnostics
- Replacement for digital audio tape recordings

Product Overview

The Mobile DAQ System from Bloomy Controls is a specially designed data acquisition system for high-channel count, high-acquisition rate applications. Able to log high-speed data at up to 30 kS/sec and lower-speed data at 5 kS/sec simultaneously, the Mobile DAQ System offers measurement flexibility for companies that have multiple applications where inputs may vary. Industries that benefit from the Mobile DAQ System include aerospace, automotive, energy, military, and others where applications require large amounts of data to be acquired and analyzed.

Based on the PXI/SCXI platform, the Mobile DAQ System is more economical and easier to maintain than legacy VXI- and VME-based systems. The modularity of PXI/SCXI also allows the Mobile DAQ System to be customized for specific requirements and easily expanded to meet companies' dynamic data acquisition needs.



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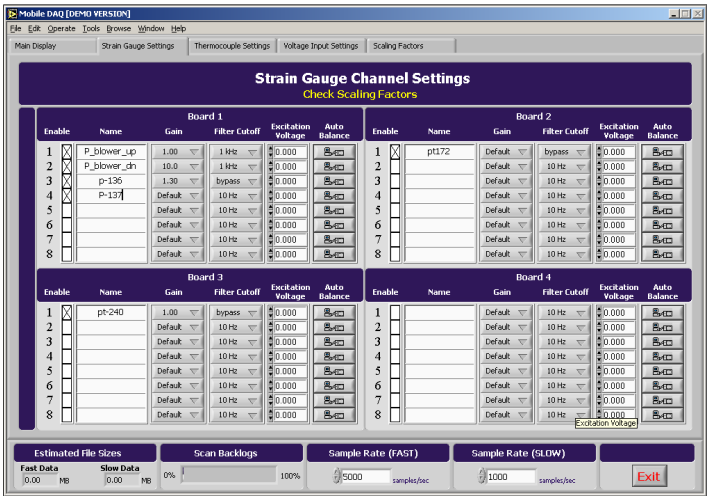
Mobile DAQ System

Typical Input Measurement Configuration



Strain Gauge: 32 channels

- Simultaneous sampling on all channels
- Programmable 0-10 V excitation
- Programmable gain (1-1,000), selectable per channel
- Programmable 4-pole Butterworth filter (10 Hz, 100 Hz, 1 kHz, 10 kHz) per channel
- Quarter-, half-, and full-bridge completion
- Autobalancing inputs
- Custom connection options include terminal strip, MS, or DIN connectors
- Stream synchronized data to disk at up to 30 kS/sec on all channels

Thermocouple: 64 channels

- Linearization for J, K, N, and T type sensors, selectable on a channel-by-channel basis
- Automatic cold-junction compensation
- Standard two-pin thermocouple jacks
- Stream synchronized data to disk at up to 5 kS/sec on all channels

Analog Signal: 64 channels

- Programmable gain (0.5, 1, 100), selectable per channel
- Voltage or current inputs
- Linear slope and offset scaling to engineering units, selectable per channel
- Custom connection options include terminal strip, BNC, MS, or DIN connectors
- Stream synchronized data to disk at up to 5 kS/sec on all channels

Additional Sensor Types Available

- Accelerometers, LVDTs, RTDs

Host Computer

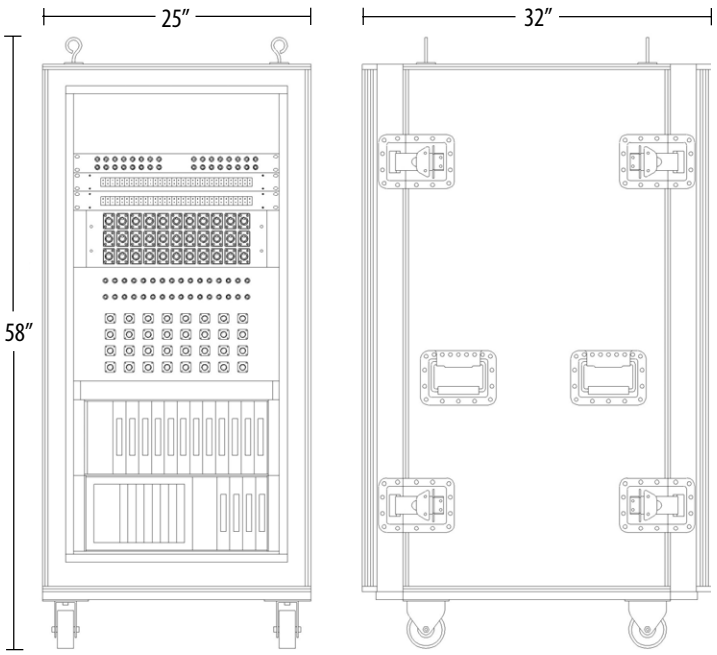
- Dual-channel 128 MB/sec MXI-3 fiber optic data link; Host PC may be located up to 90 feet from data acquisition package
- High-performance desktop PC and full operating software
- Optional rugged, roll-around cabinet

Software

- User interface and control application written in LabVIEW
- User can fully configure acquisition rates, excitation levels, thermocouple types, and engineering unit conversions
- View live data from up to 8 channels simultaneously
- Data streams to disk in compact binary format

Physical

- Rugged instrumentation enclosure houses rack-mounted data acquisition and signal conditioning electronics, along with all connection hardware
- Cabinet conforms to ATA 300 requirements for portable equipment
- Equipped with removable front and rear covers, heavy-duty casters, and overhead lifting eyes
- Operating environment: 0 to 40 °C, 5 to 95% relative humidity, non-condensing
- Outside dimensions: 25″ wide x 32″ deep x 58″ tall
- Approximate weight: 170 lbs.



To request demo software or to order, contact:

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