

Experts in Shock and Vibration Measuring Systems

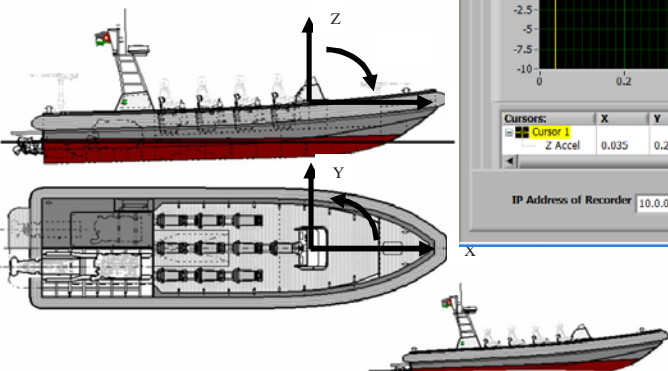
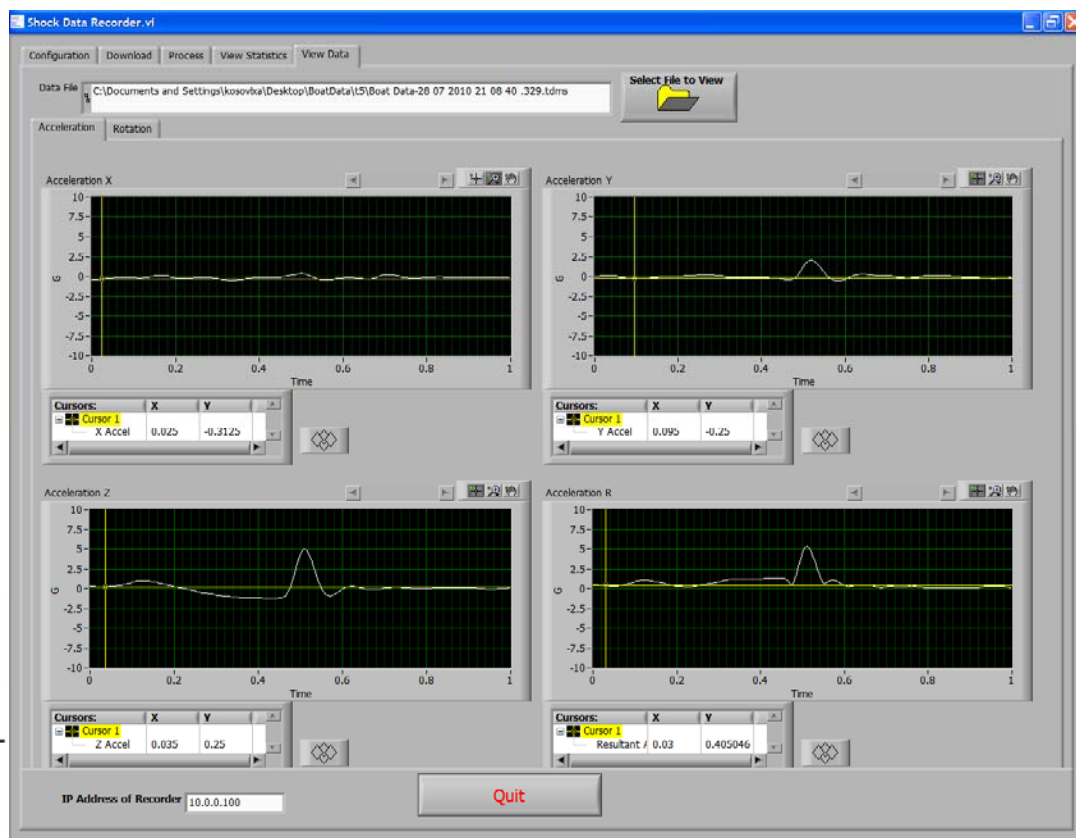
Key Features

- **Continuous Real Time Measurement**
 - Always on
 - Embedded FPGA Processor
 - Full Event Capture
 - Min 12 Bit Precision
 - Up to 32 Channels
 - Digital/Analog I/O
 - System Readily Integrates with Other Measurement Applications
- **Rugged Sealed Package**
 - Waterproof
 - Shock Resistant
 - Operates from Standard 24 Volt Vehicle Power
- **User Interface**
 - PC Configuration and Visualization Software
 - Ethernet Download
 - Occupant Exposure Statistics Calculated
 - Data Archival



6 Degree-of-Freedom Impact Measurement

- Continuously monitor linear and rotational impact
- Separate 6 DoF sensor package
- Trigger on user settable threshold
- Record full impact event waveform
- User selectable pre and post trigger
- Record thousands of events
- Filter unwanted signal components
- Display Data with cursor function
- Calculate impact peak and energy levels
- Display Histogram table
- Export data to Excel



Item	Functionality
PC Requirement	Windows XP Professional Service Pack 3 Pentium III Processor or higher Minimum 1GB of RAM Minimum 500MB of hard drive space for application
Device setup	User settable parameters: <ul style="list-style-type: none"> • Time and date (UTC) • Sampling frequency • Trigger level • Post-trigger event duration • Pre-trigger duration
Data downloading	Download data from device and to clear the data storage onboard device
Processing of data	These are the operations performed on downloaded data files: <ul style="list-style-type: none"> • Calculation of rotational acceleration wave forms • Calculation of maximum amplitude of events in selected set of files and energy under the trigger pulse waveforms for each degree of freedom in each file
Data viewing	Select data file and display information in all linear and rotational axis <ul style="list-style-type: none"> • 3 graphs display linear acceleration for each axis • 3 graphs display rotational acceleration for each axis • 12 tables display the distribution of peak acceleration and area under the trigger impulse waveform for each of the 6 degrees-of-freedom of acceleration.
Data export	Data may be saved in .csv files for manipulation in EXCEL

Item	Specification
Measurement type	6 DOF (3 translational, 3 rotational)
Measurement range	Up to 100g
Sampling rate	Selectable 200 – 2000Hz in 1Hz increments (with proper anti-aliasing filter)
ADC resolution	Minimum 12 bits
Trigger level	Selectable from 2g in 0.1g increments to 100g
Event duration	1 to 2000ms in 10ms increments
Frequency of Events	Up to 40/minute
Duration of Usage	min 6 hrs/day, 21 days/month
Recording Time	min 1 month
Pre trigger time	1 to 500ms in 1ms increments
Enclosure	Waterproof (IP67 or NEMA 6P)
Power	24 VDC @ 1A maximum (Vehicle Power)
Power interrupt features	Program and data stored in non-volatile memory. When power is restored, the device returns to normal operation.
Size	160 cubic inches (approximately 10 x 8 x 2 inches)
Connectors	Power/Ethernet/Sensor
Weight	64 oz.
Data storage	Minimum 165 MB nonvolatile
Device mounting	Adaptable Shock Isolation