



# NoiseWatch®

## Blast Analysis Monitor (BLAM)

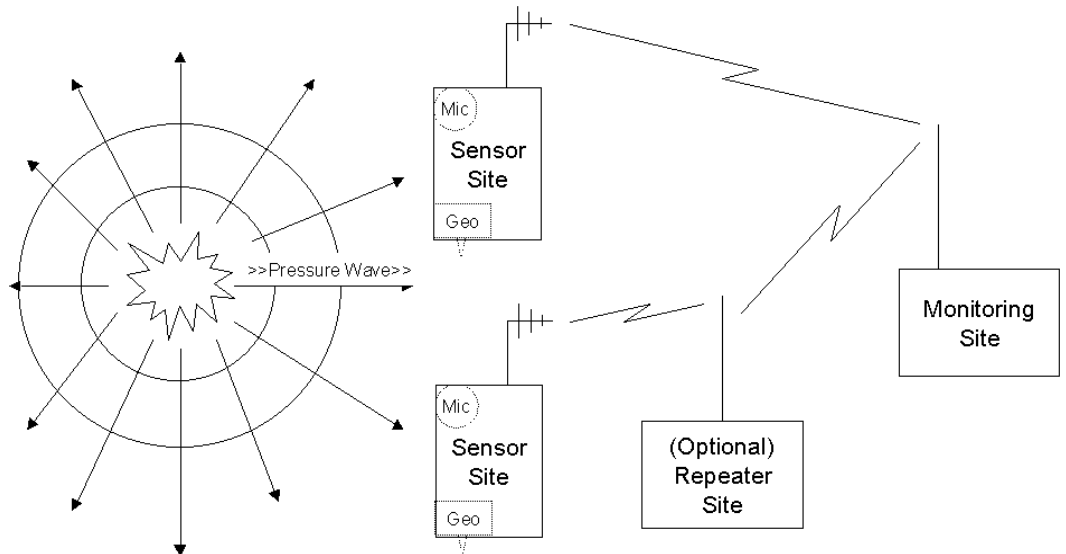
### HIGH "G" SURVIVABILITY

OmniShock™ is uniquely suited for missile, projectile, and explosive ordnance experiments when recovering instrumentation data after a very high "G" shock event is needed to evaluate the test.

### DATA ACQUISITION AND RECORDING

OmniShock™ was developed for extremely high "G" test experiments to sample data with excellent fidelity, store the data in non volatile memory, and easily recover the data after the experiment.

Sensor sites are designed to automatically detect and store short duration (impulsive) noise events and run continuously without operator intervention. They also automatically report alerts, which are impulsive events that exceed a programmed level by the operator. On command, or by request from the monitoring site, a sensor site will send stored data, report communications link status, run a BITE check, change an alert threshold, or allow the operator to enable or disable the alert feature. It uses a micro-controller to digitize and discriminate events of interest. When an event occurs, the site identifies the peak sound pressure level and duration of the acoustic event along with the peak energy value collected by the geophone during the same interval that is used for communications between the two sites.



# NoiseWatch® Features and Specifications

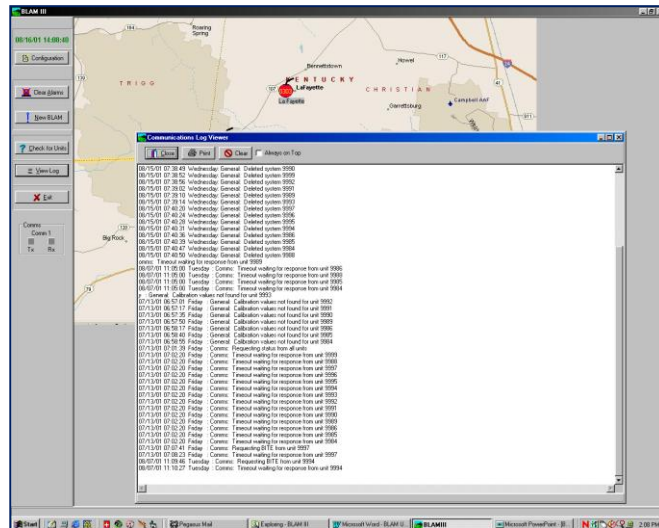
## OmniShock™ DESIGN

OmniShock™ has been developed to provide high fidelity data after being subjected to a very high shock event. OmniShock™ is designed to provide the flexibility to digitally sample external analog signals or to record external digital data. OmniShock™ has the optional capability to use an integral triaxial accelerometer to measure shock events up to 60,000 “G”s. A user interface that configures the unit prior to an event, retrieves the event data, and provides the capability to analyze the data. The data is stored in OmniShock™ on a solid state 4 Gbyte non volatile memory. OmniShock™ has been tested to survive very high shock events and reliably retrieve the critical data.

For more information on any of our products or services please visit us on the Web at:  
[www.mcqinc.com](http://www.mcqinc.com)

© March 2011 McQ Inc.

The monitoring site is typically the user's base of operations. Information from all the sensor sites is transmitted to this location via the spread spectrum data links. The data is stored for display, analysis, and producing reports at the user's discretion. The equipment installed at a monitoring site includes RF hardware (antenna, cables, etc.), a Processing Unit (PU), a personal computer (PC), interconnecting cables, and mounting hardware, as required. The PC uses a Windows® operating system to execute the BLAM software. The operator display shows a map of the area and a tabular listing of the blasts detected by the system. The current BLAM system is being upgraded to provide the capability to locate the blast. An acoustic array at each BLAM Monitoring Site will provide a line of bearing to the blast.



### Specifications:

- Sound Pressure Level: 100 to 140 db Unweighted
- Acoustic Frequency Response: 1 to 400 Hz
- Seismic Frequency Range: 10 to 100 Hz
- Timing Resolution: 100 milliseconds
- Environmental: Temperature -40 to +60 Degrees C, Rugged for Outdoor Survivability in All Weather Conditions
- Power: Battery Powered with Solar Recharging, 10 to 18 Volts DC
- Communications: 902 to 928 MHz or 2.4 GHz Two-way Unlicensed RF Modems. RF Relays for Long Range Connectivity from the Sensor Site to the Monitoring Site



1551 Forbes Street  
Fredericksburg, VA  
22405-1603 USA  
T: 540.373.2374  
[www.mcqinc.com](http://www.mcqinc.com)