

Minimate™ Blaster

Blast Vibration and Overpressure Monitor

Range of Applications:

- Blast-monitoring for compliance

The **Instantel® Minimate™ Blaster** vibration and overpressure monitor has the features you need for reliable blast monitoring in a simple and economical package.

Simple

The monitor incorporates an eight-key tactile keypad and on-board LCD, with a clearly structured, menu-driven interface - giving you complete control for quick and easy setup and operation. In addition, the **Instantel® AutoRecord™** record stop mode automatically sets the record length based on vibration and overpressure activity, helping ensure that you record the entire event. It also comes with an integrated monitoring log, for compliance with many local and regional regulatory standards.

Flexible

Producing professional reports is easy. Print directly from the **Minimate Blaster** monitor to one of many compatible printers, or transfer events directly to an **Instantel Blastmate® III** monitor and print using the integrated on-board printer. Events can also be easily downloaded to a computer via a standard RS-232 interface using the included **Instantel Blastware®** event management and reporting software. From there, you have all the tools to generate full-page event reports and frequency analysis.

Reliable

A vibration monitor is a necessity, so it had better work – always. That's why so many blasters trust **Instantel** reliability. With standard features like zero-dead-time while recording, 300-event memory, and a battery that has the capacity for 210 hours of continuous monitoring, the **Minimate Blaster** gives you confidence that you will get the record every time.



Key Features

- Small, rugged package for portability and easy setup.
- Easy-to-use keypad with intuitive menu-driven operation.
- Rechargeable gel cell battery allows continuous monitoring for up to 210 hours.
- Non-volatile memory with storage capacity for up to 300 events.
- Sample rates from 1024 to 4096 samples per second.
- Integral monitor log records time and duration of monitoring jobs.
- **AutoRecord** record stop mode allows the monitor to continue recording as long as activity cycles above the trigger level.
- Continuous monitoring means zero dead time, even while the unit is processing.
- Fully compliant with the International Society of Explosives Engineers (ISEE) performance specifications for blasting seismographs.



Minimate™ Blaster

General Specifications

Minimate Blaster

Channels	Microphone and Triaxial Geophone
Vibration Monitoring	
Range	Up to 254 mm/s (10 in/s)
Resolution	0.127 mm/s (0.005 in/s) or 0.0159 mm/s (0.000625 in/s) with built-in preamp
Accuracy	+/- 5% or 0.5 mm/s (0.02 in/s), whichever is larger, between 4 and 125 Hz
Transducer Density	2.13 g/cc (133 lbs/ft ³)
Frequency Range	2 to 250 Hz, within zero to -3 dB of an ideal flat response
Air Overpressure Monitoring	
Weighting Scale	Linear
Range	88 to 148 dB (500 Pa (0.072 PSI) Peak)
Resolution	0.25 Pa (0.0000363 PSI)
Accuracy	+/- 10% or +/- 1 dB, whichever is larger, between 4 and 125 Hz
Frequency Range	2 to 250 Hz between -3 dB roll off points

Waveform Recording

Record Modes	Manual and Continuous
Seismic Trigger	0.125 mm/s to 254 mm/s (0.005 to 10 in/s)
Acoustic Triggers	100 to 148 dB
Sample Rate	1024 Hz to 4096 Hz per channel (independent of record time)
Record Stop Mode	Fixed record time, AutoRecord record stop mode
Record Time	1 to 20 seconds (programmable in one-second steps) plus 0.25 second pre-trigger
AutoRecord™ Time	Quiet window programmable from 1 to 9 seconds, plus a 0.25 second pre-trigger. Event is recorded until activity remains below trigger level for duration of quiet window, or until available memory is filled. Recording uninterrupted by event processing - no dead time
Cycle Time	
Storage Capacity	
Full Waveform Events	300 one-second events at 1024 Hz sample rate
Event Summaries	1750

Physical Specifications

Dimensions	81 x 91 x 160 mm (3.2 x 3.6 x 6.3 in)
Weight (monitor and sensors)	2.6 kg (5.7 lbs)
Battery	Rechargeable 6 V sealed gel cell - capacity for 210 hours of continuous monitoring
User Interface	8-key keypad with domed tactile keys
Display	4-line x 20-character, high contrast, backlit LCD with on-line help
PC Interface	RS-232
Auxillary Inputs and Outputs	External Trigger, Remote Alarm
Environmental	
LCD Operating Temperature	-10 to 50°C (14 to 122°F)
Electronics Operating Temperature	-20 to 60°C (-4 to 140°F)
Remote Communications	Compatible with Telephone, GSM, Cellular, RF, Satellite and Short-haul modems.
Additional Feature	Monitor start/stop timer



Corporate Office:
309 Legget Drive,
Ottawa, Ontario K2K 3A3
Canada

US Office:
808 Commerce Park Drive,
Ogdensburg, New York 13669
USA

Toll Free: (800) 267 9111
Telephone: (613) 592 4642
Facsimile: (613) 592 4296
Email: sales@instantel.com

©2004 Instantel Inc. All rights reserved. Instantel, Blastmate, and Blastware are registered trademarks of Instantel Inc. in North America. Minimate, AutoRecord, and the Instantel logo are trademarks of Instantel Inc. Printed in Canada, October, 2003.

716B0001 Rev 01 - Product Specifications are Subject to Change