

# Blastmate® II

## Full-Featured Vibration and Air Overpressure Monitor

### Range of Applications:

- Blast-monitoring for compliance
- Pile driving
- Construction activity
- Demolition activity
- Heavy transportation
- Remote monitoring

The **Blastmate II** has proven to be the most accepted, reliable, rugged, and easy to use blast-monitoring seismograph available anywhere. But it doesn't stop there. With InstanTel's flexible histogram recording mode the **Blastmate II** has established itself as a leader in compliance monitoring in non-blasting applications including pile driving, construction and demolition.

### Simple

Everything you need is contained in a single, rugged case with a total weight of less than 6.8 kg (15 lbs).

The full keyboard and high-resolution plotter give you the flexibility to setup the monitor, add notes and print complete event reports in the field, without a computer.

Events are saved in **Blastmate II**'s reliable on-board non-volatile memory, and can be transferred to a computer via a convenient RS-232 interface, or a compatible modem, using InstanTel's **Blastware®** Event Management Software.

### Easy to use

The LCD display guides you through simple menu-driven setup and operation. Dedicated single use function keys eliminate confusing multi-key operations and allow direct access to setup functions, while the full keyboard makes entry of company and site information quick and easy.

### Tough

**Blastmate II** monitors are built to last with a fully sealed top panel, non-corrosive industrial grade connectors and sealed electronics, all packed in a rugged, water-resistant case. **Blastmate II**s have been buried in muck piles, rolled off trucks, and run over by backhoes and have survived in working order. You can be confident that the **Blastmate II** will reliably meet your needs, and survive to tell about it.



### Key Features

- Integrated high-resolution plotter for event reports in the field without the need for a computer.
- Full keyboard simplifies entry of job-specific notes and information.
- Dedicated function keys and intuitive menu-driven operation enable quick and easy setup.
- Rugged, self-contained package with storage compartment for sensors and accessories.
- Rechargeable gel cell battery with 30-day capacity (continuous monitoring).
- Non-volatile memory with standard 40 event storage capacity and optional 300 event capacity.
- Histogram recording supports long-term monitoring of pile driving, construction or transportation activity.
- Timer mode allows you to record only when you want to.



# Blastmate® II

## General Specifications

## Blastmate II

Channels	Microphone and Triaxial Geophone
Vibration Monitoring	
Range	Up to 254 mm/s (10 in/s)
Resolution	0.0159 mm/s (0.000625 in/s)
Accuracy	+/- 1% @ 15Hz
Transducer Density	2.08 gl/cc (130 lbs/ft <sup>3</sup> )
Frequency Range	2 to 250 Hz
Air Overpressure Monitoring	
Weighting Scales	Linear, C-weight or A-weight
Linear and C-weight Range	88 to 142 dB (250 Pa (0.036PSI) Peak)
Linear and C-weight Resolution	0.5 Pa (0.0000725 PSI)
Linear and C-weight Accuracy	0.2 dB at 30 Hz and 127 dB
Linear and Frequency Response	2 to 250 Hz
A-weight Range	50 to 110 dBA
A-weight Resolution	0.2 dBA

## Waveform Recording

Record Modes	Manual, Single-shot, Continuous, Programmed start/stop
Seismic Trigger	0.125 to 254 mm/s (0.005 to 10 in/s)
Acoustic Triggers	
Linear and C-weight	100, 102, 104 and 105 to 142 dB
A-weight	55 to 110 dBA
Sample Rate	1024 Hz per channel (independent of record time)
Record Time	1 to 10 seconds (programmable in one-second steps)
AutoRecord Time	1 to 24 seconds (1 to 60 seconds with optional memory upgrade)
Cycle Time	Less than 5 seconds per second of recording time
Storage Capacity	
Full Waveform Events	40 one-second events (300 event capacity with optional memory upgrade)
Summary Events	250 (1750 event capacity with optional memory upgrade)

## Histogram Recording

Recording Interval	5 seconds, 15 seconds, 1 minute or 5 minutes
Storage Capacity	5,760 intervals - 20 days at 5-minute intervals (110 days with optional memory upgrade)

## Physical Specifications

Dimensions	269 x 355 x 165 mm (10.6 x 14.0 x 6.5 in)
Weight	6.8 kg (15 lbs)
Battery	Rechargeable 6V sealed gel cell - capacity for 30 days continuous monitoring
User Interface	63 domed tactile keys including full keyboard and dedicated keys for common functions
Display	2-line x 20-character LCD
Printer	Precision high-resolution plotter
PC Interface	RS-232
Auxillary Inputs and Outputs	External trigger, Remote alarm
Environmental	
Printer/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



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