

# Minimate Blaster™

## Blast Vibration and Overpressure Monitor

### Range of Applications:

- Blast-monitoring for compliance
- Compliant to ISEE Standard
- Compliant to optional DIN 45669-1 Standard

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® Compliance Module** 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** monitoring system 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 1,024 to 4,096 S/s.
- 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.
- Compliant with optional DIN 45669-1 Standard



# Minimate Blaster™

## General Specifications

## Minimate Blaster

Channels	Microphone and Triaxial Geophone (ISEE or optional DIN 45669-1)
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 (ISEE / DIN)	+/- 5% or 0.5 mm/s (0.02 in/s), whichever is larger, between 4 and 125 Hz / DIN 45669-1 standard
Transducer Density	2.13 g/cc (133 lbs/ft <sup>3</sup> )
Frequency Range (ISEE / DIN)	2 to 250 Hz, within zero to -3 dB of an ideal flat response / 1 to 315 Hz
Maximum Cable Length (ISEE / DIN)	75 m (250 ft) / 1,000 m (3,280 ft)
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 to 254 mm/s (0.005 to 10 in/s)
Acoustic Triggers	100 to 148 dB
Sample Rate	1,024 S/s to 4,096 S/s per channel (independent of record time)
Record Stop Mode	Fixed record time, <b>Instantel® AutoRecord™</b> record stop mode
Record Time	1 to 20 seconds (programmable in one-second steps) plus 0.25 second pre-trigger
<b>AutoRecord</b> Time	Auto 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 auto 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 1,024 S/s sample rate
Event Summaries	1,750

## 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, coordinate download from GPS
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 Features	Monitor start/stop timer



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**The World's Most Trusted Vibration Monitors**