



VANGUARD

CONSTRUCTION SOLUTIONS

## Seismograph Sales Options

[VanguardNewYork.com](http://VanguardNewYork.com)

# Providing Seismograph Sales & Monitoring Services to the Construction Industry.



Vanguard Construction Solutions provides construction monitoring services in the Northeastern US to ensure your construction projects comply with local, city and state regulations while minimizing costs.

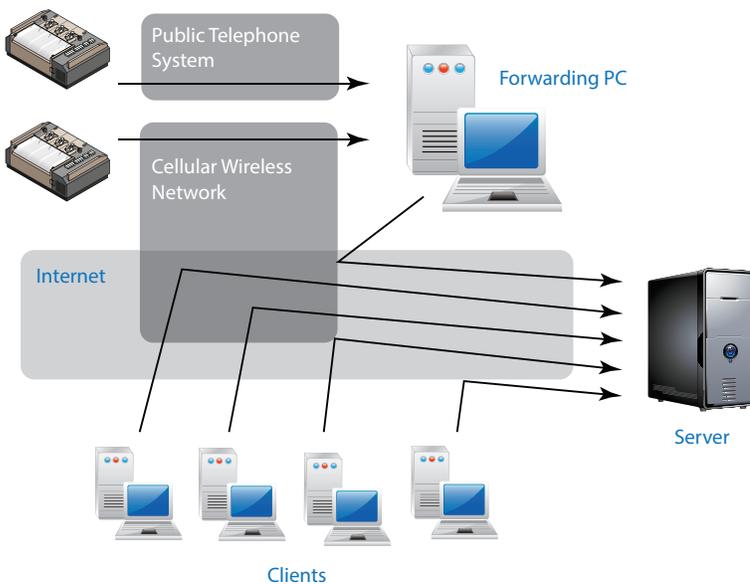
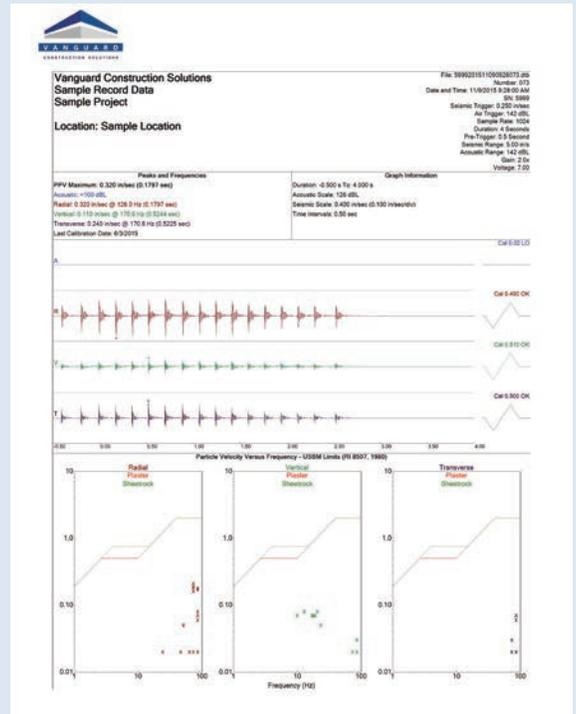
We are a leading provider of seismographs for purchase specifically for construction vibration monitoring. As an authorized distributor of White Industrial Seismology products, **we provide the support services needed to have confidence in your seismograph purchase. As an added bonus, data downloading and vibration analysis software is provided at no extra cost when you purchase a seismograph from us.**

## Data & Reporting

We understand that being able to quickly turnaround well organized, detailed reports is a must in the construction industry. Accurately document your project, meet deadlines, and stay organized. You'll be able to print, download, view and send customizable reports that look professional and meet any required compliance standards.

## Features

- Easy to read data format
- Customizable report content
- Sort & filter events
- Alter graph scaling
- Separate Particle Velocity vs. Frequency Charts
- Color coded data
- Seismograph equipment settings



## Web Based Vibration Monitoring

Our seismograph equipment can be left unattended for web based vibration monitoring via internet connection. You'll be able to receive and monitor vibration data as well as transfer it to a password-protected web site for others to view. This service is ideal for time-sensitive projects or large projects that utilize several seismographs at once where reporting requirements are very strict.

## Key Benefits

- Safe, secure & reliable data.
- Save both time & money.
- 24/7 access to data.
- Collect, store & distribute data conveniently.

For more information about buying  
seismograph equipment visit  
[www.VanguardNewYork.com](http://www.VanguardNewYork.com)  
or call 845-803-0295

# Mini-Seis III™ - The Next Generation



The Mini-Seis III™ is our next generation seismograph. It supports USB for data transfer to a computer and thumb drive. It has over 500 MB of memory and can store over 1000 waveform records. It has an easy-to-read display and is designed for low power. Operating modes include Waveform, Histogram, Histogram/Waveform & Manual Trigger. A system log tracks when the instrument is turned on and off, changes are made to the operational setup, and whether or not any triggers occurred during a waveform operation. Options include A-weighting and special ranges.

***This package is available at a very affordable price.***

## Mini-Seis III™ Quick Features

- Sampling rates from 1024 to 4096 over 4 channels. Rates of 8192, 16384 & 65536 are in development.
- Waveform duration from 1 to 120 seconds over all sample rates.
- Selectable 16 or 12 bit resolution when retrieving data.
- Memory storage for over one thousand waveform & histogram records.
- Direct data retrieval via USB and/or USB thumb drive.
- Serial baud rates up to 230400.
- External printing option.
- Remote access with approved cellular modem.
- Waveform, Histogram, Histogram/Waveform and Manual Trigger modes.
- Special sensitivity options.

## Mini-Seis III™ Technical Specifications - *More specifications at VanguardNewYork.com*

Channels	3 seismic & 1 acoustic channels standard optional 8 channel upgrade available.
Seismic (tri-axial geophone package)	
Range	Standard 254 mm/s (10 in/s) .
Resolution	0.008 mm/s (0.0003 in/s).
Frequency Range (ISEE)	Varies with sample rate, from 2 to 250 Hz at 1024 samples/s.
Frequency Range (DIN)	Varies with sample rate, from 2 to 250 Hz at 1024 samples/s.
Accuracy (ISEE)	1 to 315 Hz (minimum 2048 sample rate needed).
Accuracy (DIN)	Conforms with the ISEE Performance Specifications for Blasting Seismographs. DIN 45669-1 Standard.
Transducer Density	Approximately 2.01 g/cc (125 lb./ft3) .
Acoustic	
Weighting	Linear Weighting or A Weighting.
Linear Range	58 to 148 dBL (512 Pa, 5.12 Mb, 0.074 PSI).
Linear Resolution	0.0156 Pa (0.000156 Mb, 0.00000023 PSI).
Linear Frequency Response	Varies with sample rate, from 2 to 250 Hz at 1024 samples/s.
Linear Accuracy	Conforms with ISEE Performance Specifications for Blasting Seismographs.
A-Weighting Range	66 to 134 dBA.
A-Weighting Resolution	0.02 dBA.
Timer	Allows an instrument to be active only during selected times on a daily basis.
Communication	USB Serial – baud rates from 1200 to 230400.
External Data Storage	Write to USB drive.
System Log	A log is kept in memory to track the active monitoring periods and whenever important setup changes are made.
Waveform	
Modes	Waveform, Manual, Auto, Snapshot, Waveform/Histogram.
Sample Rate	1024, 2048 and 4096 [rates of 8192, 16384 and 65536 (for single channel are under development.)]
Duration	1 to 60 seconds at 1024, 2048 or 4096 sample rate.
Pre-Trigger	1 second at 1024 sample rate. The pre-trigger time decreases proportional to the sample rate.
Minimum Trigger Levels	Seismic - 0.127 mm/sec (0.005 in/s). Acoustic - 88 dBL, 68 dBA .
Records Stored	Varies depending on the sample rate and duration. The unit can store well over 1000 records at a 1024 sample rate and 5 second duration.
Downtime Between Events	There is no downtime or data loss between events.
Dynamic Sensor Test	A dynamic sensor test is performed at the end of every event. This test will appear in the pre-trigger of continuous events.
Histogram	
Modes	Histogram and Histogram/Waveform.
Sample Interval	1, 10, 20, 30, 40, 50 or 60 seconds.
Data Stored	Channel peaks and their frequencies, also the vector sum.
Records Stored	Histogram data will vary depending on the sample interval. The unit can store approximately 100 eight hour days at a 10 second interval.
Dynamic Sensor Test	A dynamic sensor test is performed at the beginning & end of every histogram.

# Mini-Seis™ - The Best Value



The Mini-Seis™ is the very definition of a great blast monitoring seismograph at an affordable price. It is ideal for all kinds of blast vibration monitoring and for most continuous vibration monitoring in bar graph mode. Rugged, reliable and very easy to use, the Mini-Seis™ sets the standard for value in a seismograph.

***If you need a low-cost seismograph that is accurate, rugged and reliable, the Mini-Seis™ is the perfect choice.***



## Mini-Seis™ Quick Features & Options

### Key Features

- Lower maintenance & calibration costs.
- Rugged construction & shielded against RF interference.
- Keypad & display for easy field setup & data review.
- External seismic package & microphone interchangeable between units of like sensitivity.
- Selectable seismic & acoustic recording range & trigger level, sample rate & record duration.
- Rechargeable internal battery.
- Ability to use AC or DC power for long term monitoring.
- Wave form (self-trigger & manual-trigger) & continuous bar graph (histogram) modes.
- Sophisticated, non-loss data compression results in small record sizes & fast data transfer.

### Available Options

- **Transducer Sensitivity** - The standard transducer sensitivity is termed a 2G. Recording levels can range from 0.005 ips (0.127 mmps) to 10.24 ips (260 mmps). We also offer X1, X4 and X8 geophone gains, which modify the standard X2 gain proportionally. These are standard options but we can also do custom gains based on specific needs.
- **Microphone Sensitivity** - The standard microphone is limited to 148 dB. We also offer a standard option 160 dB microphone. If necessary, we can supply microphones capable of recording up to 5 or even 10 psi (185 to 190 dB).



# Product Pricing

## Sales Pricing



### Mini-Seis III™ The Next Generation

**\$5,275.00**



### Mini-Seis™ The Best Value

**\$3,975.00**



**VANGUARD**

CONSTRUCTION SOLUTIONS

Because of our unique business structure, no project is too large or too small for Vanguard. Ingenuity and an eye for recognizing potential issues before they arise make Vanguard the obvious choice for your project.

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