

THOR[™]

Advanced

Event Management Software

Transform Your Minimate Pro Monitoring Unit Into An Advanced Data Analysis Tool

THOR Advanced is a powerful software package that offers enhanced analysis features and access to advanced sensors transforming THOR's event management compliance software into a sophisticated, scientific, research and analysis tool.



Signature Hole Analysis

Reduce vibrations/noise efficiently using **Signature Hole Analysis** calculations and simulations.

Human Exposure Reports

Calculate the effects of Blast Vibrations (VDV) on people in the surrounding area with **Human Exposure Reports**.

Transfer Function

Monitor Structural response using the **Transfer Function**. Calculate the structural response based on a comparison of two waveforms recorded inside and simultaneously outside of a structure.

Advanced Analysis Features Take Event Reporting to the Next Level

- Perform in-depth data analysis on events recorded with an Instantel monitoring unit. (Series III, Minimate Pro, Micromate)
- Define six sensor channels with custom sensitivities and trigger levels.
- Create Setup Files for maximum precision high-frequency applications where your Minimate Pro can sample up to 65,536 S/s.
- Create your own waveforms or apply 24 integrated operations to study your recorded waveforms.
- Benefit from a range of advanced sensors.
- Create preset commands using one or more of the specific advanced functions.

Histogram-Combo[™] Mode

Using Histogram-Combo mode you can record both Waveform and Histogram events simultaneously. Set your time interval and view the peak data for that interval.

Range of Applications

- | | | | |
|-----------------------------|--------------------------|------------------------|------------------------|
| • Construction Activity | • Underwater Monitoring | • Environmental | • Vibration Dose Value |
| • Near-Field Blast Analysis | • Demolitions | • Structural / Bridges | • Travel Time |
| • Far-Field Blast Analysis | • Heavy Transportation | • Tunnels and Subways | • Arrival Times |
| • Multi-Point Monitoring | • Sound/Noise Monitoring | • Blasting | |
| • Pile Driving | • Research/Education | • Compaction | |

THOR Includes the Following Compliance Standards and Graphs

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|--|--|---|
| • Australia 2187.2-1993 | • Function de Ponderation | • NZS/ISO 2631-2:1989 Combined curves |
| • Brazilian Standard NBR 9653/2005 | • GFEE + Ministère Environnement | • QLD APP Standard |
| • British Standard 7385 | • Harmoniska Svangningar | • Recommendation GFEE/GFEE* |
| • BS 6472:1992 (Curves 8,16,20,32,60,90,128) | • Indian CMRI, DGMS India (A) & (B) | • Swiss SN 640 312a (Mining/Pile Driving/Traffic) |
| • Criterio Prevencion (Une 22.381) | • Indonesian SNI 7571:2010 | • Toronto 514-2008 |
| • Czech and Slovak Standard | • ISEE Seismograph Specification -2017 | • Turkey Mining & Quarry |
| • DIN 4150 | • New Zealand 4403:1976 | • USBM RI8507 And OSMRE |
| • DIN 45669-1 (2010) | • NOM-026-SESH-2007 | |

Software Features

- Available in English, French, Spanish, Swedish
- Advanced Setup mode monitoring for Minimate Pro 4/6
- Advanced data analysis for all event data
- Requires Windows 7, 8, 10, Server 2012 R2
- Requires .NET Framework V4.5 or higher, Internet connection, USB port

Dashboard

- Status overview of all connected units
- Operating modes
- Battery life
- Allocated memory resources
- Connection details
- Recorded events
- Current setup file
- Calibration Information
- Firmware Version
- Operators
- Auto Call Home
- Start/Stop monitoring
- Run sensor checks
- Restart Unit

Units

- Complete list of units and their assigned projects
- Custom settings per unit
- Custom unit setups
- Batch firmware upgrades
- Multiple operators per unit
- Scheduling assistant to automate remote monitoring

Projects

- Customize settings per project
- Choose your compliance standards
- Relay data to Vision
- Choose your report language
- Swap between Imperial/Metric

Reports

- Industry Standards to demonstrate compliance
- Histogram (bar-graph) / Waveform reports
- Zoom in/out of graphs
- Place markers on important parts of a waveform
- Customize reports with your company logo
- Add post-event notes to a report
- Export reports to PDF, XML, ASCII or CSV

Auto Call Home

- Connect with a computer or straight to the cloud
- Create filters to direct/view data
- Manage unit resources automatically
- Generate event/log reports
- Send summaries to individual stakeholders or entire groups via email or SMS

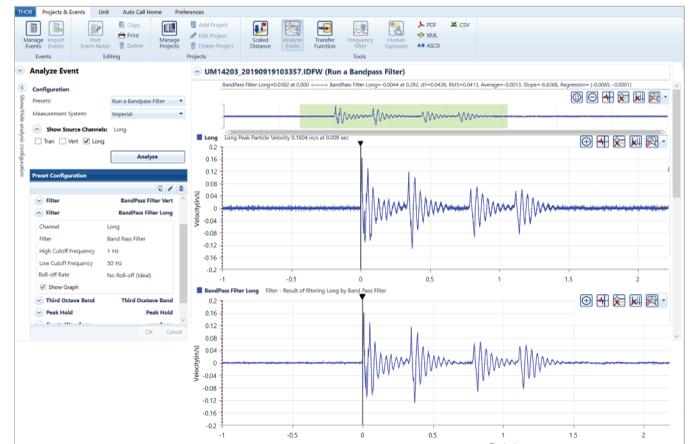
Notifications

- Send email notifications based on event type or threshold
- Receive info/warning/error notifications
- Secure SSL, TLS protocols

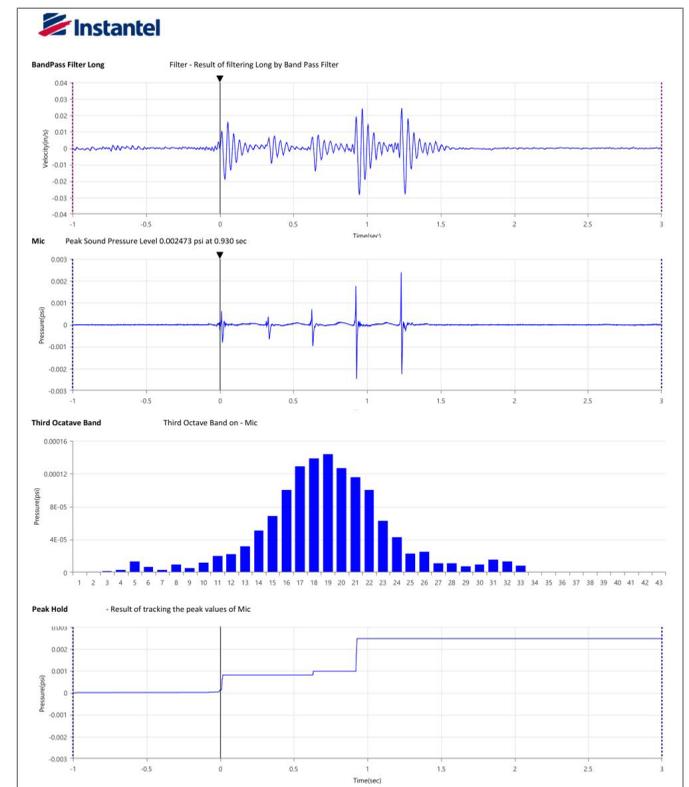
THOR's Advanced Operations on Waveforms

Benefit from these integrated operations to study your recorded waveforms, and save your own preset functions, only with THOR Advanced.

- Add / Subtract
- Create Waveforms
- Differentiate
- Fast Fourier Transform (FFT)
- Filter
- Human Exposure
- Integrate
- Interval Analysis
- Linear Superposition
- Octave Data Conversion
- Peak Hold
- Remove Offset
- Scale / Scaled Distance
- Shift
- Signature Hole Analysis
- Smooth
- Sound Calculations
- Third Octave Band
- Timeline Overlay
- Transfer Function
- Truncate
- Vector Sum



THOR Advanced Data Analysis



Example Waveform Outputs