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

THOR Includes the Following Compliance Standards and Graphs
- Australia 2187.2-1993
- Brazilian Standard NBR 9653/2005
- British Standard 7385
- BS 5472:1992 (Curves 8,16,20,32,60,90,128)
- Criterio Prevencion (Une 22.381)
- Czech and Slovak Standard
- DIN 4150
- DIN 45669-1 (2010)
- Function de Ponderation
- GFEE + Ministère Environnement
- Harmoniska Svangningar
- Indian CMRI, DGMS India (A) & (B)
- Indonesian SNI 7571:2010
- ISEE Seismograph Specification-2017
- New Zealand 4403:1976
- NOM-026-SESH-2007
- NZS/ISO 2631-2:1989 Combined curves
- QLD APP Standard
- Recommendation GFEE/GFEE*
- Swiss SN 640 312a (Mining/Pile Driving/Traffic)
- Toronto 514-2008
- Turkey Mining & Quarry
- USBM RI8507 And OSMRE
**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

**Example Waveform Outputs**

**THOR Advanced Data Analysis**