

PRODUCT CATALOG



Contents

Introduction	About Instantel							
	What We Do	04						
	A History of Industry Firsts from Instantel	04						
	Our Applications	05						
	Our Products	06						
Micromate®	System Overview							
	Sensors (Geophones, Borehole Geophone, Microphones)							
	Accessories							
	Upgrades							
	Cables	15						
Minimate Pro4™/	System Overview							
Minimate Pro6™	Sensors (Geophones, Borehole Geophones, Microphones, Hydrophone, Accelerometers)	18						
	Accessories	21						
	Cables	23						
	Upgrades	24						
	Replacement Parts	25						
Software	Vision //™	26						
Contware	Live Data™	29						
	THOR™	30						
	THOR Advanced™	31						
Cupplementery	Specifications	32						
Supplementary	Dealer Representatives & Calibration Centers							
	Our Services	35						

About Instantel

For over 40 years, Instantel has been a global leader with best-in-class vibration, noise and air overpressure equipment for quarries, mining, construction, civil, geotechnical and other applications. Our products have contributed to the success of our customers' projects in over 85 countries and on countless sites. From specialized sensors and recording options, to remote data collection and a cloud-based data hosting solution, Instantel provides solutions that work.

We are proud of our position as an industry leader, boasting many industry firsts, but it does not stop there. We are committed to continuous improvement through innovation. We understand that our customers face challenging environments daily and need reliable data fast to ensure the success of their projects. We specialize in providing the tools that complete each project safely, quickly, and within compliance.

Our flexible product portfolio allows our customers to select the monitoring solution that best meets their needs - whether deep in the earth, above ground, or underwater.

Welcome to Instantel.



The World's Most Trusted

Vibration • Noise • Air Overpressure • Remote Monitoring • Cloud-Based Data Management • Calibration • Repairs • Software Solutions





What We Do

We design, manufacture, calibrate and service all our products. For our software systems, we take care of all the backend support and development. We thrive on creating industry firsts, and at Instantel we've created a lot of them.

Our dedicated Product Development team strives to keep us at the forefront of innovation, while working with our customers to improve our current product lines. We design software solutions that fully integrate with our units, making data collection smooth and effortless. For us, ease-of-use is a way of thinking, designed into each and every Instantel product.

At Instantel, we don't just deliver industry-leading products, we also deliver world-class service. Our knowledgeable Technical Support team is dedicated to providing our customers with practical expertise and advice. Our customers often face difficult installations and we are here to help them find the right solution.

We drive quality in every service we deliver and never take shortcuts. We calibrate at every frequency on the spectrum, not just a subset. When your units are calibrated by Instantel, you can guarantee that your event data is accurate. Our Service and Calibration team is committed to low turnaround times, keeping units where they are needed – in the field.

A History of Industry Milestones from Instantel



Compact Seismograph



Touch Screen Interface



Auto Call **ACH** Home



Histogram-Combo™ Mode





Compliance Reporting



In-field

We know our industry is complex and with it comes complex requirements. That's why we are always looking at how we can improve our product offering and our service. Being an industry leader is not enough. Innovation, reliability, and quality is the cornerstone of everything we do. From accessories, to complex monitoring units, to calibrations, to customer service, you can trust Instantel.

Our Applications

Operation of heavy equipment and activities such as construction, blasting, pile driving, and demolitions can create vibrations, air overpressure, and/or noise that can have adverse effects on the surrounding structures and environment both above and underneath the ground. With underwater and marine activities, both marine life and the ecosystem are at risk. Monitoring these activities protects people, structures and the environment.



The world's most trusted

Vibration · Noise · Air Overpressure · Remote Monitoring · Cloud-Based Data Management · Calibration · Repairs · Software Solutions

Construction Sites	Underwater and Marine	Blasting
Tunnels and Subways	Oil and Gas Exploration	Demolition
Quarries	Pile Driving	Remote Access
Underground Mines	Dynamic Compaction	Research
Civil Projects	Vibration Dose Value (VDV)	

Our Products

With our solid fleet of Micromate and Minimate Pro products, you will always have the right solution for your most demanding projects. Access post-monitoring data and reporting from your local computer using THOR software or over our cloud-based Vision *II* platform. Instantel offers complete hardware and software systems for all your monitoring needs!





Micromate® System Overview



How a Micromate Monitoring Unit Connects Using THOR and Vision // Software Systems



The Micromate monitoring unit's geophone and microphone sensors capture every relevant vibration from a host of industrial applications. Using Waveform, Histogram or a combination of the two modes, the Micromate monitoring unit gathers event data and then transmits the data to a computer or mobile device via a direct connection, USB, or via a cellular modem over the internet.



Micromate[®]

Seamlessly record vibration, sound/noise, or air overpressure with just one monitoring unit. The Micromate monitoring unit was custom engineered with a rugged and reliable design to withstand harsh conditions, including water-resistance. Experience zero dead-time that includes 10 to 15 days of uninterrupted monitoring with the provided internal battery. The 15 MB of memory can store up to 1,000 events, upgradeable to 4,000 events with the extended 60 MB memory option.

The Micromate monitoring unit is light and portable. It is small enough to fit in the palm of your hand and features a highresolution color touch-screen display with a QWERTY key pad. It features a built-in USB port so you can easily connect a USB flash drive to transfer events or even update the unit's firmware – quickly, easily and all in the field without the need of a computer.

The Micromate monitoring unit comes with three channels for a triaxial geophone and one channel for an air overpressure or sound level microphone. Each base unit is coupled with a geophone and configured to meet one of the following industry standards:

• International Society of Explosives Engineers (ISEE-2017)	Base Unit P/N: 721A2501
• Deutsches Institut für Normung (DIN 45669-1)	Base Unit P/N: 721A2601
• Swedish Blasting (SS4604866)	Base Unit P/N: 721A3601
• Swedish Pile Driving (SS025211)	Base Unit P/N: 721A3801

Micromate Specifications Sheet Available Online





Geophones

Micromate Monitoring Unit ISEE Triaxial Geophone

2 - 250 Hz geophone calibrated to the ISEE-2017 standard. Select the geophone's cable length: Includes Triaxial Geophone Mounting Spikes (P/N: 110241)



Micromate Monitoring Unit DIN Triaxial Geophone

1 - 315 Hz geophone calibrated to the DIN 45669-1 standard. Select the geophone's cable length: Includes Triaxial Geophone Mounting Spikes (P/N: 110241) Note: Must be calibrated to a Micromate Base Unit P/N: 721A2601



Micromate Monitoring Unit Swedish Blasting Geophone

5 - 300 Hz geophone. Calibrated to the SS4604866:2011 standard. Select the geophone's cable length: Includes Triaxial Geophone Mounting Spikes (P/N: 110241) Note: Must be calibrated to a Micromate Base Unit P/N: 721A3601



Micromate Monitoring Unit Swedish Pile Driving Geophone

2 - 150 Hz geophone. Calibrated to the SS025211 standard. Select the geophone's cable length: Includes Triaxial Geophone Mounting Spikes (P/N: 110241) Note: Must be calibrated to a Micromate Base Unit P/N: 721A3801



Borehole Geophone

Micromate Monitoring Unit Triaxial Borehole Geophone

64 mm (2.5 in) borehole geophone. Select the Borehole's cable length: Calibrated to the same standard as the Micromate Base Unit. Note: Requires a 76 mm (3 in) minimum diameter borehole for installation.







Micromate Monitoring Unit Linear Microphone P/N: 721A0201

2 - 250 Hz linear microphone. Measures air overpressure on a linear scale. Calibrated to the ISEE-2017 standard. Includes a 2 m (6.5 ft) cable and Microphone Stand Assembly (P/N: 720A6001).

Instruction Sheet Available Online



P/N: 721A2301



Micromate Monitoring Unit Sound Level Microphone

10 Hz - 20 kHz Class 1 sound/noise microphone. Calibrated to the IEC 61672-1 standard. Includes a 2 m (6.5 ft) cable and a Microphone Stand Assembly (P/N: 720A6001).

Instruction Sheet Available Online





Accessories

Triaxial Geophone Leveling Plate

Includes leveling plate, feet and an integrated spirit level. For use with Micromate, Minimate Pro, Minimate Plus, Blastmate III, and Minimate Blaster external geophones.

P/N: 714A1801

P/N: 370-000024-000

P/N: 721A1201

Note: Geophone not included.



Power Adaptor

Mini USB power supply for use with Micromate monitoring units in North America. Input 100 - 240V AC. Output 5V DC, 1A.



Universal Charger

Power adaptor for use with Micromate monitoring units internationally. Input 110-240V AC 50/60Hz, Output 5V DC, 1A.



Triaxial Geophone Wall Mounts

Used to mount a triaxial geophone to a wall or other vertical surface. Includes bolts, aluminum mounting block, and mounting instructions. (Geophone not included) Optional Triaxial Geophone Modification for Wall Mounting P/N: 721A3001 Note: This optional upgrade must be performed by the manufacturer and modifies a Micromate monitoring unit Triaxial Geophone to a wall mount orientation.



Portable Field Printer

Battery operated printer that includes a USB cable. Lightweight and easily transported for printing hard copies of event reports in the field. Note: This printer has custom firmware specifically for the Micromate monitoring unit and must be purchased through Instantel to ensure compatibility.

Printer Paper (contains 5 rolls) P/N: TP5000-80-25C



P/N: 721A4301





Remote Alarm Controller

P/N: 721A0901

Self-contained controller complete with 2 m (6.5 ft) cable and high-power auxiliary drive capability for external sirens and other alarms.

Note: Requires the factory installed, Auxiliary Port option, see Micromate monitoring unit 'Upgrades' below.

Instruction Sheet Available Online 🗏





Protective Boot and Cover

P/N: 721A0301

Protective rubber boot with a clear plastic cover that can hinge on either end. Provides protection from water, dust and impact from foreign objects. Various mounting options exist for diverse installation requirements.

Instruction Sheet Available Online





Carrying Case

P/N: 721A3101

Soft carrying case used to store and carry the Micromate base units and accessories. Foam insert included.



Upgrades

Extended Memory

P/N: 721A1101

Increases the internal non-volatile memory in the Micromate monitoring unit from 15 MB to 60 MB. This optional upgrade increases the storage capacity from 1,000 events to 4,000 events.

Note: Must be configured by the manufacturer.



Extended Battery Life

P/N: 71A1301

Extends the battery life of the Micromate monitoring unit from 10 days to 15 days. Note: Must be configured by the manufacturer.



Auxiliary Port

P/N: 721A0101

For use with a remote alarm or an external trigger cable on the Micromate monitoring unit.

Note: Must be configured by the manufacturer.

Cables



External Trigger Cable

P/N: 721A1401

Includes a 2 m (6.5 ft) cable used to remotely trigger a Micromate monitoring unit.

Note: Requires the factory-installed Auxiliary Port option (P/N: 721A0101).

Instruction Sheet Available Online





Custom Extension Cable Kit

P/N: 721A3201

Kit for splicing custom length extension cables for Micromate monitoring unit geophones, borehole geophones and microphones in the field. Includes two 2 m (6.5 ft) over-molded cables. One cable has a male connector and the other cable has a female connector on one end. The other end of each cable has no connector.



10 m (33 ft) Extension Cable

P/N: 721A0803

For use with Micromate monitoring unit geophones, borehole geophones and microphones. Includes the connectors.



30 m (100 ft) Extension Cable

P/N: 721A0801

For use with Micromate monitoring unit geophones, borehole geophones and microphones. Includes the connectors.



75 m (250 ft) Extension Cable

P/N: 721A0802

For use with Micromate monitoring unit geophones, borehole geophones and microphones. Includes the connectors.



USB to RS-232 Cable

P/N: 721A1001

Includes a 1.8 m (6 ft) cable used for connecting a Micromate monitoring unit to a cellular modem.

Minimate Pro™ System Overview



How a Minimate Pro™ Monitoring Unit Connects Using THOR™ and Vision™ Software Systems



The Minimate Pro4 monitoring unit (4 channel) and Minimate Pro6 monitoring unit (6 channel) geophone and microphone sensors, along with the advanced sensors (High Frequency Triaxial Geophone, High Frequency Triaxial Borehole Geophone, High Pressure Microphone, Hydrophone, 0.5g-50g-500g Accelerometers) capture all relevant vibrations (up to 65,536 S/s) from a host of industrial applications. Using Waveform, Histogram or a combination of the two modes, the Minimate Pro monitoring unit captures event data and then transmits the data to a computer or mobile device via a direct connection or via a cellular modem over the internet.



Minimate Pro[™]

Experience a unique set of advanced monitoring capabilities when it comes to recording vibration, sound/noise, or air overpressure. Designed to weather the most extreme conditions, the Minimate Pro monitoring unit can handle anything you can throw at it. It features a rugged cast aluminum case with a waterproof rating of IP67, making it easy to monitor in wet conditions.

For those challenging applications, such as tunneling, the Minimate Pro monitoring unit includes EMI shielding and built-in noise and anti-aliasing filters to reduce noise and electrical interference.

The Minimate Pro monitoring unit allows you to never miss an event with its zero dead-time.

Enjoy up to 10 days of uninterrupted monitoring with the provided internal battery and 64 MB of memory that can store up to 8,000 events, upgradeable to 32,000 events with the extended 240 MB memory option.

The Minimate Pro monitoring unit also boasts advanced recording and reporting features. An arsenal of advanced sensors enhance its monitoring capabilities, recording up to 65,536 samples per second on all channels.

Choose between the four channel Minimate Pro4 and the six channel Minimate Pro6 base units and configure it to one of the following industry standards: International Society of Explosives Engineers (ISEE-2017) or Deutsches Institut für Normung (DIN 45669-1).

Minimate Pro4 Monitoring Unit Specifications Sheet Available Online





Geophones

Minimate Pro4/Pro6 Monitoring Units ISEE Triaxial Geophone

2 - 250 Hz geophone calibrated to the ISEE-2017 standard.

Select the geophone's cables length:

Includes mounting spikes (P/N: 1100241).



Minimate Pro4/Pro6 Monitoring Units DIN Triaxial Geophone

1 - 315 Hz geophone calibrated to the DIN 45669-1 standard. Select the geophone's cable length:

Includes mounting spikes (P/N: 1100241).



Minimate Pro4/Pro6 Monitoring Units Vibration Dose Value (VDV) Triaxial Geophone

1 - 80 Hz geophone calibrated to the DIN 45669-1 standard. Select the geophone's cables length:
Cable length 2 m (6.5 ft)
Cable length 8 m (26 ft)
Note: The VDV functionality requires THOR Advanced software (P/N: 72300201).



Minimate Pro4/Pro6 Monitoring Units High Frequency **Triaxial Geophone**

30 - 1000 Hz geophone. For near-field monitoring with a range up to 2540 mm/s (100 in/s). Includes mounting spikes, see page 23. Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online





Borehole Geophones

Minimate Pro4/Pro6 Monitoring Units ISEE Triaxial **Borehole Geophone**

2 - 250 Hz geophone calibrated to the ISEE-2017 standard P/N: 720 A5601 64 mm (2.5 in) borehole geophone with 30 m (100 ft) cable.

Note: Requires a 76 mm (3 in) minimum diameter borehole for installation.





Minimate Pro4/Pro6 Monitoring Units DIN Triaxial **Borehole Geophone**

1 - 315 Hz geophone calibrated to the DIN 45669-1 standard. . . P/N: 720A5701 64 mm (2.5 in) borehole geophone with 30 m (100 ft) cable. Note: Requires a 76 mm (3 in) minimum diameter borehole for installation.

Instruction Sheet Available Online





Minimate Pro4/Pro6 Monitoring Units Triaxial Borehole Geophone High Frequency

30 - 1000 Hz geophone for near-field monitoring P/N: 720A5801 64 mm (2.5 in) borehole geophone with 30 m (100 ft) cable. Note: Requires a 76 mm (3 in) minimum diameter borehole for installation. Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online



Microphones



Linear Microphone

P/N: 720A1801

P/N: 720A5101

2 - 250 Hz linear microphone. Measures air overpressure on a linear scale. Calibrated to the ISEE-2017 standard.

Includes a 2 m (6.5 ft) cable, microphone stand (P/N: 720A6001) and windscreen (P/N: 1712).

Instruction Sheet Available Online





Sound Level Microphone

10 Hz - 20 kHz Class 1 sound/noise microphone.

Calibrated to the IEC 61672-1 standard.

Includes a 2 m (6.5 ft) cable, a microphone stand (P/N: 720A6001) and windscreen (P/N: 410-720001-000).

Instruction Sheet Available Online





High Pressure Microphone

P/N: 720A4801 5 - 1000 Hz, up to 69 kPa (10 psi) high pressure microphone.

Measures air overpressure in close proximity or confined blasting situations. Includes a 2 m (6.5 ft) cable, microphone stand (P/N: 720A6001) and windscreen (P/N: 1712).

Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online



P/N: 720A5001

P/N: 714A7101



Hydrophone

Hydrophone

8 - 500 Hz hydrophone. Measures overpressure in water.

Includes a 60 m (200 ft) cable.

Note: Requires THOR Advanced software (P/N: 72300201).





Accelerometers

0.5 g Accelerometer

0.5 - 500 Hz. Measures low frequencies and accelerations for sensitive applications. Package includes one Cable For 0.5 g Accelerometers (P/N: R6-2-J5A-6). Requires either:

- Uniaxial Accelerometer Adaptor Cable (P/N: 720A4901) . . . P/N: 720A4901
- Triaxial Accelerometer Adaptor Cable (P/N: 720A4901) . . . P/N: 720A5201 Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online





500 g Accelerometer

1 - 3000 Hz. Measures accelerations of up to 500 g for near-field blasting applications. Package includes one Cable For 50 g & 500 g Accelerometers (P/N: 002C10). Requires either.

- Uniaxial Accelerometer Adaptor Cable P/N: 720A4901
- Triaxial Accelerometer Adaptor Cable P/N: 720A5201

Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online



P/N: 720A6401

P/N: 720A6301



50 g Accelerometer

1 - 3000 Hz. Measures accelerations up to 50 g for near-field blasting applications. Package includes one Cable For 50 g & 500 g Accelerometers (P/N:002C10). Requires either:

- Uniaxial Accelerometer Adaptor Cable P/N: 720A4901
- Triaxial Accelerometer Adaptor Cable P/N: 720A5201

Note: Requires THOR Advanced software (P/N: 72300201).

Instruction Sheet Available Online





Accessories

Accelerometer Triaxial Mounting Block (50 g & 500 g)

Used to mount up to three uniaxial accelerometers to measure P/N: 080B11 in a triaxial configuration.

For use with 50 g (P/N: 72002701), or 500 g (P/N: 72002401) accelerometers.



Accelerometer Triaxial Mounting Block (0.5 g)

P/N: 400-000289-000

P/N: 714A1801

Used to mount up to three uniaxial accelerometers to measure in a triaxial configuration.

For use with 0.5 g (P/N: 714A7101) accelerometers.



Triaxial Geophone Leveling Plate

Includes leveling plate, feet and integrated spirit level.

For use with Micromate, Minimate Pro, Minimate Plus, Blastmate III and Minimate Blaster external geophones.

Note: Geophone not included.



Triaxial Geophone Wall Mounts

Used to mount a triaxial geophone to a wall or other vertical surface. Includes bolts, aluminum mounting block, and mounting instructions. (Geophone not included)

Optional Triaxial Geophone Modification for Wall Mounting P/N: 720A6601 Note: This optional upgrade must be performed by the manufacturer and modifies a Minimate Pro monitoring unit Triaxial Geophone to a wall mount orientation.



Remote Alarm Controller

A self-contained controller complete with 5 m (16.3 ft) cable and a high power auxiliary drive capability used for external sirens and other alarms.

Instruction Sheet Available Online





Splitter Box

P/N: 720A5501

P/N: 720A3901

Used to connect up to three uniaxial sensors on a Minimate Pro monitoring unit, complete with 2 m (6.5 ft) cable.

Instruction Sheet Available Online





USB Serial Adaptor Kit

P/N: 714A7001

Converts an RS-232 to a USB 2.0 connector.

For use with a serial cable to download event data from a Minimate Pro. Minimate Plus, Blastmate III or Minimate Blaster to a PC.



Carrying Case

P/N: 720A6501

Soft carrying case used to store and carry the Minimate Pro base units and accessories. Foam insert included.



Universal Charger

P/N: 712A5301

Power adaptor for use with Minimate Pro monitoring units internationally. Input 110-240V AC 50/60Hz. Output 12V DC, 1.67A.



Power Adaptor

P/N: 370-000002-000

Power adaptor for use with Minimate Pro monitoring units in North America. Input 110V AC. Output 12V DC, 1A.

Cables



30 m (100 ft) Extension Cable

P/N: 720A3301

Includes a 30 m (100 ft) shielded cable for use with Minimate Pro monitoring unit geophones, borehole geophones and microphones. Includes connectors.



75 m (250 ft) Extension Cable

P/N: 720A3302

Includes a 75 m (250 ft) shielded cable for use with Minimate Pro monitoring unit geophones, borehole geophones and microphones. Includes connectors.



Null Modem Cable

P/N: 720A3401

Includes a DB-9M 2 m (6.5 ft) cable.

For use when connecting a cellular modem to a Minimate Pro monitoring unit. Note: One null modem cable is required for each monitoring unit.



Serial Cable

P/N: 720A3101

Includes a 1.7 m (5.7 ft) RS-232 cable for connecting a Minimate Pro monitoring unit to a PC.

Note: Requires a PC with a 9-pin serial connector or USB Serial Adaptor Kit, (P/N: 714A7001) see page 20.



Ethernet Cable

P/N: 720A4101

Includes a 1.5 m (4.9 ft) RJ-45 high-speed network download cable. Transfers events and setup files to a PC over a network connection for faster download speeds.



Custom Cable Connector Assembly

Base price for custom length extension cable connectors and assembly. Must be purchased with a specified Custom Length Extension Cable.

Custom Length Extension Cable

P/N: 301-000034-000

Custom length extension cable for Minimate Pro monitoring units (ordered by the m/ft). Note: Must be purchased with Custom Cable Connector Assembly (P/N: 720A3305).



Remote Alarm/RS-232 Splitter Cable

P/N: 720A4001

46 cm (18 in) cable for use when both a Remote Alarm Controller and a modem must be connected to a Minimate Pro monitoring unit at the same time.



Make/Break Trigger Cable

P/N: 720A3501

Includes a 2 m (6.5 ft) cable.

Starts recording an event when either the wires make or break the contact. Can be used with an operator's button or to correspond with a blast detonation. Package includes connectors and instructions.

Instruction Sheet Available Online





Uniaxial Accelerometer Adapter Cable

P/N: 720A4901

Includes a 2 m (6.5 ft) cable that provides power from a Minimate Pro monitoring unit to operate an accelerometer.

Instruction Sheet Available Online





Triaxial Accelerometer Adapter Cable

P/N: 720A5201

Includes a 2 m (6.5 ft) cable that provides power from a Minimate Pro monitoring unit to operate up to three accelerometers in a uniaxial configuration.

Instruction Sheet Available Online





Extended Memory

P/N: 720A5901



Increases the internal non-volatile memory in the Minimate Pro unit from 64 MB to 240 MB. This optional upgrade increases the storage capacity from 8,000 events to 32,000 events.

Note: Must be configured by the manufacturer.



GPS Upgrade

P/N: 720A6601

Adds GPS capability to the Minimate Pro monitoring unit. Allows the unit to synchronize the recorded event data's time within 100 microseconds. Note: Requires a factory-installed GPS port that must be configured by the manufacturer. Minimate Pro monitoring unit sold separately.

Replacement Parts For Micromate and Minimate Pro



Triaxial Geophone Mounting Spike

P/N: 1100241

Geophone spike (76 mm/3 in) for use with Instantel Triaxial Geophones or monitors with internal geophones. Sold individually.

720A5101, 720A4801, Series III P/N: 714A9801, 714A2001 or 714A5501)



Microphone Stand Assembly

Microphone Stand Assembly, total height 81.3 cm (32 in). P/N: 720A6001 Extends the Microphone Stand Assembly an additional 28 cm (11 in). For use with Linear Microphones, Sound Level Microphones and High Pressure Microphones. (Micromate P/N: 721A0201, 721A2301, Minimate Pro4/Pro6 P/N: 720A1801,

Microphone Windscreens



Sound Level Microphone Windscreen P/N: 410-720001-000 Foam cover for use with Minimate Pro units Sound Level Microphone (P/N: 720A5101) or the Micromate unit Sound Level Microphone (P/N: 721A2301).

Foam cover for use with the following Linear Microphone assemblies: (Micromate P/N: 721A0201, Minimate Pro4/Pro6 P/N: 720A1801, 720A4801, Series III P/N: 714A9801, 714A2001 or 714A5501).







Your data 24/7/365, from anywhere.



Vision II, our new cloud-based monitoring platform, is designed with the user in mind. Store, report, and analyze event data recorded with an Instantel Micromate monitoring unit. With instant access to your projects, and featuring Live Data™, Vision II gives you a powerful array of tools to simplify your everyday tasks and keep all stakeholders informed.

Live Data™

- View event data in near real-time from anywhere with an internet connection via laptop, smartphone, PC,
- Prevent exceedances before they occur.

Project and Fleet Management Made Easy

- Quickly add new projects, and set the warnings, alarms, and compliance standards.
- Add people and monitoring units to projects, or move them to another project with just a few clicks.
- Receive advance alerts for calibration requirement.
- Gage your device's critical information, like battery level, even when you are not on the job site or near the unit.

SnapShot™ - Get Answers in One Look

- Easily identifiable results by color.
- Take the burden of time consuming reviews see alerts and exceedances with just one look.
- See the status of your device in the field with gauges for critical information.
- Hover over any data point for values.

Scalable

- Vision II can easily handle thousands of devices or projects.
- Manage everything, from simple to complex projects, all in one place.

Warnings and Alerts

- You determine the warnings and alerts, set the limits for 'caution' and 'exceedance, and then receive the alert yourself or send it to a team member to take action.
- Receive messages via SMS or e-mail.
- Take preventative actions before reaching exceedances to prevent fines and project shutdowns.

No Locked-In Monthly Fees

With Vision II, you pay only when the unit is on a project and monitoring.

Vision | Interface



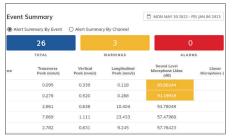
View Events in Near Real-Time, 24/7/365



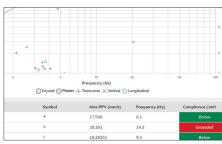
Project and Fleet Management



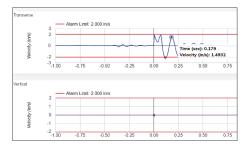
Gauges for Critical Information



ShapShot™ - Answers in One Look



Compliance Graph with SnapShot™ Views for Compliance and Exceedance



Hover Over Any Data Point for Values



Warnings and Alerts via SMS or E-mail



Scalable - Thousands of Units



No Locked-In Monthly Fees



Real-Time Viewing from Anywhere



User-Friendly Interface



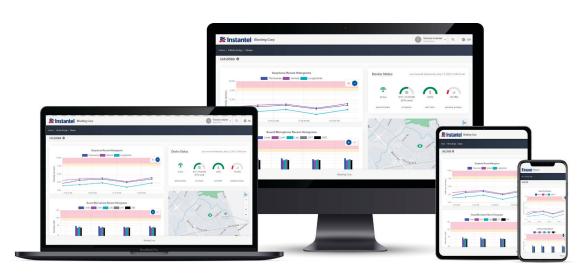
Access on a PC, laptop, tablet, or mobile phone.



Live•)) **Data**™

View event data in near real-time, 24/7/365 from anywhere.

A feature of Vision II, our new cloud-based monitoring platform, Live Data allows you to view event data as it happens. Whether on the job site, in an office, or the comfort of your vehicle, you have data when you need it.





Live Data™

View event data in near real-time from anywhere with an internet connection via laptop, smartphone, PC, or tablet.

Warning Alerts and Exceedance Alarms

- Take preventative action before exceedances occur.
- Determine the alerts and notifications you need by setting the limits for 'caution' and 'exceedance'. When you exceed your custom limits, you receive a notification by e-mail or SMS.
- Receive alerts yourself or send them to a team member who can take action.

Real-Time Viewing Access

View Live Data from anywhere - a jobsite, your office, or the comfort of your vehicle.

THOR



Download free at Instantel.com

THOR is our software platform to store and manage event data on a local computer. With THOR software you can view data in the form of waveform charts, histogram bar-graphs and perform various analytic calculations to better understand your event data. THOR software let's you configure custom settings to manage your fleet of monitoring units and quickly update onboard parameters to adapt to specific monitoring requirements.

Manage Connected Units Without Stepping Foot On Site

Units can be connected to THOR software remotely using wireless modems, when an event takes place, they send their data using THOR software's Auto Call Home service. This feature allows you to have a full view of your fleet's monitoring status in near real-time.

Organize Event Data and How You See It

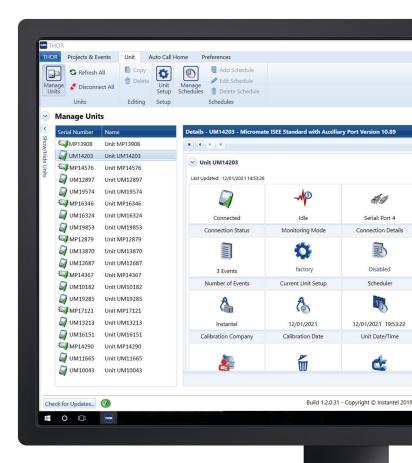
THOR software will automatically filter events into pre-configured projects so that you can sort events by site, contract or customer. Use customizable email groups to send automatic notifications and inform stakeholders when it counts.

Interactive and Customizable Event Reporting

THOR software lets you quickly and easily identify trends in your event data and provides easy exporting of event reports into PDF format.

THOR Software Includes the Following Compliance Standards and Graphs

- Australia 2187.2-1993
- Brazilian Standard NBR 9653 2005
- British Standard 7385
- BS 6472 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



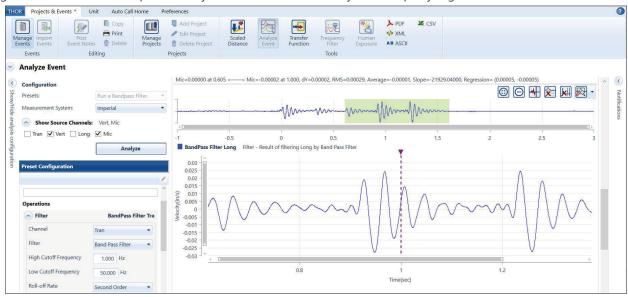
Tutorial videos available on YouTube on how to setup your devices.



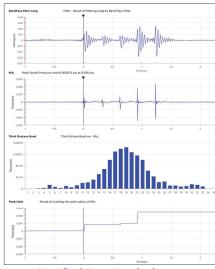
P/N: 72300201

With THOR software's Advanced license you can transform event data without altering the original event file. Convert waveform data between velocity, acceleration and displacement. Data can be filtered, truncated, frequency weighted, displayed in third-octave bands and more. Playback sound clips or perform signature hole analysis.

Create a customized set of operations when analyzing events and benefit from THOR software's high-resolution event reports that you can customize with your company logo.



Perform Advanced Functions on Your Waveforms



Detailed Data Analysis

Advanced Sensors

With THOR Advanced software you also benefit from specialized sensors and enhanced performance of standard sensors with sample rates up to 65,536 samples per second.

- Hydrophone (8 500 Hz)
- High-Frequency Geophone (30 1,000 Hz)
- High-Frequency Borehole (30 1,000 Hz)
- High-Pressure Microphone (up to 10 psi)
- Accelerometers: 0.5 g (0.5 500 Hz), 50 g (1 3,000 Hz), or 500 g (1 - 3,000 Hz)

Compliance Graphs

Waveform or Histogram compliance graphs available.

- Customize with your logo
- Export to PDF, XML, ASCII, or CSV

THOR software resources available online:

- Specifications Sheet
- Advanced Specifications Sheet

Microphone Specifications

		NDARD OVERPRINEAR MICROPH			SOUND LEVI	HIGH PRESSURE MICROPHONE	
	MICROMATE	MINIMATE PRO COMPLIANCE	MINIMATE PRO ADVANCED	MICROMATE	MINIMATE PRO COMPLIANCE	MINIMATE PRO ADVANCED	MINIMATE PRO ADVANCED SENSOR
PART NUMBER	721A0201	720A1801	720A1801	721A2301	720A5101	720A5101	720A4801
RESPONSE STANDARD	ISEE - 2017	ISEE - 2017	N/A	IEC 61672	2 CLASS 1	N/A	N/A
FREQUENCY WEIGHTING		Linear		A-Weight o Response: Fast (12	or C-Weight 25 ms) or Slow (1 s)	Unfiltered	Linear
FREQUENCY RANGE		2 - 250 Hz			10 Hz - 20 kH	łz	5 - 1,000 Hz
AMPLITUDE RANGE		Up to 500 Pa (0.0725 psi) [148	dB]	3	30 - 140 dB (max 160 dB) Up to 69 kPa (10 Max Pressure 1,724 kP		Up to 69 kPa (10 psi) Max Pressure 1,724 kPa (250 psi)
TRIGGER LEVEL	2-5	148 dB 00 Pa 0.0725 psi	0.256 - 500 Pa 0.000036 - 0.072515 psi	33 - 140 dB		33 - 140 dB 0.448 - 100 Pa (normal) 0.01424 - 25 Pa (sensitive)	
SAMPLE RATES	1,024 - 4,096 S/s	1,024 - 4,096 S/s	512 - 65,536 S/s	1,024 - 4,096 S/s	512 -4,096 S/s	512 - 65,536 S/s	512 - 65,536 S/s
RESOLUTION	0.0156 Pa (0.05 dB)	0.0156 Pa (0.05 dB)	0.0156 Pa (0.05 dB)	0.05 (Display Li		0.03 Pa (normal) 0.89 mPa (sensitive)	0.00214 kPa (0.00031 Psi)
CABLE LENGTH		2 m (6.5 ft)			2 m (6.5 ft)		2 m (6.5 ft)
MAXIMUM CABLE LENGTH		75 m (250 ft)			75 m (250 ft)	75 m (250 ft)
SENSITIVITY	N/A	N/A	0.0064452 V/Pa 44.4404804 V/psi	N/A		0.0038 V/Pa (normal) (5.511 X 10 ⁻⁷ V/psi) 0.1200 V/Pa (sensitive) (0.0000174 V/psi)	0.3222605 V/psi (0.0467044 V/kPa) ¹
TEMPERATURE RANGE	-40° to 50°C (-40° to 122°F)	-40 to 50°C (-40 to 122°F)	-40 to 50°C (-40 to 122°F)	-10° to 50°C (14° to 122°F)		-10° to 50°C (14° to 122°F)	N/A
REQUIRED SOFTWARE	THOR Compliance	THOR Compliance	THOR Advanced	TH Comp		THOR Advanced	THOR Advanced

^{1.} See calibration certificate for nominal values.

Micromate Monitoring Unit Specifications - Sensors

	ISEE Geophone			IN HONE		SWB GEOPHONE		VP Hone	BOREHOLE GEOPHONES (COUPLED WITH BASE UNITS)	
PART NUMBER	721A2901	721A2902	721A3301	721A3302	721A3501	721A3502	721A3701	721A3702	721A2401	721A2402
RESPONSE STANDARD	ISEE -	- 2017	DIN 45 CLA			04866 (SWB)	SS02 (SV	25211 VP)	• ISEE - 2017 • DIN 45669-1 CLASS 1 • SS4604866 2011 (SWB) • SS025211 (SWP)	
FREQUENCY RANGE	2 - 250 Hz		1 - 315 Hz		5 - 300 Hz		2 - 150 Hz		2 - 250 Hz (ISEE - 2017) 1 - 315 Hz (DIN 45669-1 CLASS 1) 5 - 300 Hz (SS4604866 2011, SWB) 2 - 150 Hz (SS025211, SWP)	
VELOCITY RANGE		54 mm/s in/s)		54 mm/s in/s)		0 mm/s 9.84 in/s)	0.1 - 25 mm/s (0.0039 - 0.98 in/s)		Up to 254 mm/s (All Standards) (10 in/s)	
RESOLUTION		8 mm/s 31 in/s)		8 mm/s 31 in/s)		8 mm/s 31 in/s)		88 mm/s 131 in/s)	0.00788 mm/s (All Standards) (0.00031 in/s)	
SENSOR DENSITY		g/cc bs/ft³)		g/cc bs/ft³)		g/cc lbs/ft³)	2.1 g/cc (131 lbs/ft³)		1.73 g/cc (All Standards (108 lbs/ft³)	
CABLE LENGTH	2 m (6.5 ft)	5 m (16.4 ft)	2 m (6.5 ft)	5 m (16.4 ft)	2 m (6.5 ft)	5 m (16.4 ft)	2 m (6.5 ft)	5 m (16.4 ft)	30 m (All Standards) (100 ft)	75 m (All Standards) (250 ft)
MAXIMUM CABLE LENGTH		00 m 50 ft)		1,000 m (3,250 ft)		1,000 m (3,250 ft)		00 m 50 ft)	1,000 m (All Standards) (3,280 ft)	
TEMPERATURE RANGE		50 °C 122 °F)		50 °C 122 °F)	-40 to 50 °C (-40 to 122 °F)		-40 to 50 °C (-40 to 122 °F)		-40 to 50 °C (-40 to 122 °F)	
REQUIRED SOFTWARE		IOR bliance		OR bliance		IOR bliance		OR Iliance	THOR (All Standards) Compliance	



Minimate Pro Monitoring Unit Specifications - Standard Sensors

	IS	EE	D	IN	DIN/VDV		BOREHOLE ISEE	BOREHOLE DIN				
PART NUMBER	720A2001	720A2004	720A2002	720A2005	720A2003	720A2006	720A5601	720A5701				
RESPONSE STANDARD	ISEE -	- 2017	DIN 45669-1 CLASS 1		DIN 45669-1 CLASS 1		ISEE - 2017	DIN 45669-1 CLASS 1				
FREQUENCY RANGE	2 - 2	50 Hz	1 - 3	15 Hz	1 - 8	0 Hz	2 - 250 Hz	1 - 315 Hz				
VELOCITY RANGE		54 mm/s in/s)		54 mm/s in/s)	Up to 254 mm/s (10 in/s)		Up to 254 mm/s (10 in/s)	Up to 254 mm/s (10 in/s)				
RESOLUTION		8 mm/s 31 in/s)		8 mm/s 31 in/s)	0.00788 mm/s (0.00031 in/s)		0.00788 mm/s (0.00031 in/s)	0.00788 mm/s (0.00031 in/s)				
SENSOR DENSITY	2.3 g/cc (144 lbs/ft³)		2.3 g/cc (144 lbs/ft³)		2.3 g/cc (144 lbs/ft³)		1.73 g/cc (108 lbs/ft³)	1.73 g/cc (108 lbs/ft³)				
CABLE LENGTH	2 m (6.5 ft)	8 m (26.2ft)	2 m (6.5 ft)	8 m (26.2 ft)	2 m 8 m (6.5 ft) (26.2 ft)		30 m (100 ft)	30 m (100 ft)				
MAXIMUM CABLE LENGTH		i m i0 ft)		00 m 50 ft)	1,000 m (3,250 ft)		75 m (250 ft)	1,000 m (3,280 ft)				
SENSITIVITY		0.0126874 V/mm/s 0.0126874 V 0.32226 V/in/s) 0.0126874 V 0.32226 V/in/s)			0.0126874 V/mm/s (0.32226 V/in/s)				0.0126874 V/mm/s (0.32226 V/in/s)	0.0126874 V/mm/s (0.32226 V/in/s)		
TEMPERATURE RANGE		50°C 122°F)		50°C 122°F)	-40 to 50°C (-40 to 122°F)						-40 to 50°C (-40 to 122°F)	-40 to 50°C (-40 to 122°F)
REQUIRED SOFTWARE	THOR Co	mpliance	THOR Co	mpliance	THOR Compliance/ THOR Advanced (VDV)						THOR Compliance	THOR Compliance

Note: All Minimate Pro4/Pro6 Standard Sensors can operate in Advanced mode and benefit from high sample rates (up to 65,536 S/s) when configured with a THOR Advanced license.

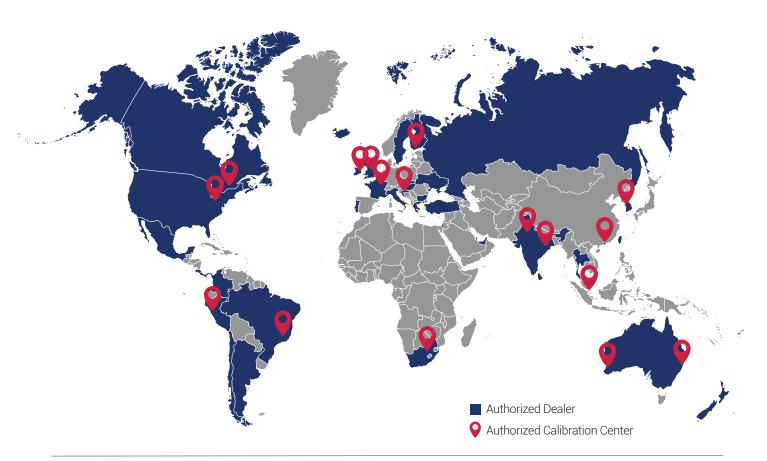
Minimate Pro Monitoring Unit Specifications - Advanced Sensors

	HIGH FREQUENCY GEOPHONE	HIGH FREQUENCY BOREHOLE	HYDROPHONE	0.5 G ACCELEROMETER	50 G ACCELEROMETER	500 G ACCELEROMETER
PART NUMBER	720A4701	720A5801	720A5001	714A7101	720A6301	720A6401
RESPONSE STANDARD	N/A	N/A	N/A	N/A	N/A	N/A
AMPLITUDE RANGE	2540 mm/s (100 in/s)	2540 mm/s (100 in/s)	324 kPa (47 psi)	0.5 g max < 10 g pk	50 g max +/- 10,000 g pk	500 g max +/- 10,000 g pk
FREQUENCY RANGE	30 - 1,000 Hz	30 - 1,000 Hz	8 - 500 Hz	0.5 Hz - 500 Hz (±3dB)	1 Hz - 3 kHz	1 Hz - 3 kHz
RESOLUTION	0.0788 mm/s (0.00310 in/s)	0.0788 mm/s (0.0031in/s)	0.0101 kPa (0.00146 psi)	0.0000155 g	0.00155 g	0.0155 g
TRIGGER LEVELS	1.27 - 2540 mm/s (0.05 - 100 in/s)	1.27 - 2540 mm/s (0.05 - 100 in/s)	0.162 - 324 kPa (0.0234 - 47 psi)	0.00032 g	0.032 g	0.256 g
RECOMMENDED SAMPLE RATE	4,096 S/s	4,096 S/s	65,536 S/s	2,048 S/s	16,384 S/s or greater	16,384 S/s or greater
NATURAL FREQUENCY	30 Hz	30 Hz	14.7 Hz	815 Hz	≥ 22 kHz	≥ 38 kHz
SENSOR DENSITY	2.3 g/cc (144 lbs/ft³)	1.73 g/cc (108 lbs/ft³)	N/A	N/A	N/A	N/A
CABLE LENGTH	2 m (6.5 ft)	30 m (100 ft)	60 m (200 ft)	1.8 m (6 ft) Cable (Part No. R6-2-J5A-6)	3 m (10 ft) Cable (Part No. 002C10)	3 m (10 ft) Cable (Part No. 002C10)
MAXIMUM CABLE LENGTH	1,000 m (3,250 ft)	1000 m (3,250 ft)	Max Operating Depth 46 m (150 ft)	1.8 m (6 ft)	3 m (10 ft)	3 m (10 ft)
MOUNTING THREAD	Connector	Connector	Connector	3/8 - 16 tapped hole	10-32 UNF-2B	10-32 UNF-2B
SENSITIVITY	0.00126874 V/mm/s (0.032226 V/in/s)	0.00126874 V/mm/s (0.032226 V/in/s)	0.0099463 V/kPa (0.068566 V/psi)	6.4451998 V/g	0.064452 V/g	0.0064452 V/g
TEMPERATURE RANGE	N/A	N/A	N/A	N/A	N/A	N/A
REQUIRED SOFTWARE	THOR Advanced	THOR Advanced	THOR Advanced	THOR Advanced	THOR Advanced	THOR Advanced

Note: All Minimate Pro4/Pro6 Standard Sensors can operate in Advanced mode and benefit from high sample rates (up to 65,536 S/s) when configured with a THOR Advanced license.



Instantel Authorized Dealer Representatives & Calibration Centers



Dealer Representatives

To find an Instantel Authorized Dealer Representative nearest you, please see our Dealer Locator Map at www.instantel.com.

Americas

- Canada
- USA
- Argentina
- Brazil
- Chile
- Colombia
- Costa Rica
- Mexico
- Peru

Africa

South Africa

Europe

- Bulgaria
- Croatia
- Finland
- France
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Monaco
- N-Ireland
- Portugal
- Slovakia
- Sweden
- UK

South Pacific

- Australia
- New Zealand

Asia

- Bahrain
- Hong Kong
- Israel
- India
- Russia
- Singapore
- South Korea
- Taiwan
- Thailand
- Turkey
- UAE
- Ukraine

Calibration Centers



To find an Instantel Authorized Calibration Center nearest you, please see our Calibration Center Locator Map at www.instantel.com

Americas

- Canada
- USA
- Brazil
- Peru

Croatia

Europe

- Finland
- France
- Ireland
- UK

Africa Asia

- Hong Kong
- India
- Singapore
- South Korea

South Pacific

- Australia
- · South Africa

Interested in becoming an **Instantel Authorized Dealer?** To learn more please contact: sales@instantel.com

Our Services



Calibration

We recommend that your equipment returns to Instantel annually for calibration. We calibrate at every frequency on the spectrum, not just a subset, so you can be sure it is working in accordance with industry guidelines and specifications. Once completed, a calibration certificate is issued specifying conformity to international standards such as the ISEE and DIN.

Service@instantel.com 1-800-267-9111



Service

Whether your unit is sent for repairs, upgrades or calibration, we pride ourselves in our quality workmanship and never take shortcuts. With Instantel, you can guarantee that your event data is accurate. Our Service, Repairs and Calibration team is committed to low turnaround times, keeping units where they

Service@instantel.com 1-800-267-9111

are needed – in the field.



Support

Instantel is dedicated to providing the highest quality of service through knowledgeable and responsive technical support. Get support by phone, email or Skype. Browse our website's frequently asked questions (FAQs) section or open a ticket to have your unit repaired.

Support@instantel.com 1-613-592-4642



Company Headquarters

309 Legget Drive Ottawa, Ontario Canada, K2K 3A3

United States

808 Commerce Park Drive Ogdensburg, New York USA, 13669

Contact

Telephone: 1.613.592.4642 Toll Free (N.A.): 1.800.267.9111 Email: sales@instantel.com

Visit Our Website

