

Series III

Product Catalog



InstanTel®

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BlastWare III Windows Software

Standard with all monitors, the Compliance Module gives you all the tools you need to produce professional compliance reports.

Extensive Event Control:

- Automatic Store and Print – upload and print all events directly from the monitor
- Sophisticated Event List Manager – customize and save summary data formats
- Event List Control – select events based on monitor number, date, time, peaks, and location
- Archive Events – convenient bundling of events and compact storage formats

Full Communication Support:

- Direct PC Access – convenient setup and monitor control directly from the PC
- Remote Communications – automatic downloading of event data to your PC using Auto Call Home

Comprehensive Reporting:

- Concise Reports – one page report is complete and easy to read
- Full Windows Printer Support – high resolution, large format, full color printouts
- Standard Compliance Analysis – frequency analysis to any national or local standard
- Scaled Distance Analysis – presented in an easy-to-read regression line graph
- Flexible Notes Entry – create your own headings and extended notes to 640 characters; customize printed reports with your company logo
- Flexible Units Reporting – reports in imperial or metric units, dB for sound
- Post Event Notes – add extra comments after an event has been recorded
- Monitor Log, Daily Self Check – complete record of all activity and status

Other Important Features:

- ASCII Output – allows use of third party analysis software
- Series II Support – full compatibility with InstanTel's Series II monitors
- Customize Channel Names – individual channels for language or location

Optimum System Requirements

For Compliance or Advanced Module:

- 350 MHz Pentium II CPU
- 32 MB RAM, minimum 10 MB Hard Disk Space
- 3.5" HD Floppy Drive and a free RS232 Serial Port
- Mouse Pointing Device is recommended
- Modem required for Auto Call Home feature- (MNP10EC capable for cell phone networks)

The Advanced Module includes all the features of the Compliance Module plus functions for advanced analysis and processing of waveform data as well as customization features. It can be used for improved blast performance, for environmental monitoring, or for experimental measurements that go well beyond standard compliance monitoring.

Powerful Analysis Tools:

- Detailed Wave Display – zoom in and make direct measurements quickly and easily
- Display Control – select any of 8 channels, grid, color, calculated values, and scale
- Histogram Display – look at the whole picture or focus in on a particular time interval
- Automatic Calculations – frequency, time, delta Y, RMS, slope, and linear regression calculated between the cursor points
- FFT Analysis – view energy frequency content for all or select only part of a waveform
- Timeline Analysis – compare designed time delays with actual measured values
- VOD Analysis – View and manipulate VOD data recorded with the VODMate or VOD Module

Extensive Signal Processing:

- Wave Process – "what if" analysis functions including add, subtract, shift, truncate, and test wave
- Vector Sum – waveform display of the resultant of two or three axis values
- Integrate & Differentiate – displays displacement or acceleration from velocity waves
- Filter Function – high, low, or bandpass filters to eliminate unwanted frequencies
- Scale Function – converts waveform to any unit of measurement and/or magnitude
- Shift and Sum – shifts and adds waves using timelines for blast simulation analysis

Fully Customizable:

- Individual Channels – edit sensor name, units, sensitivity, sample rate, and trigger levels
- Compliance Graph Editor – lets you create your own custom frequency standard
- Language Editor – customize labels and text for different languages or applications

BlastMate III



- BlastMate III Base Unit with 300 event memory capacity, four channels, Standard Transducer with installation spikes, Linear Microphone with stand, BlastMate III to PC Connecting Cable, Operator Manual, BlastWare III Compliance Module and Manual, AC adapter, 3 printer paper rolls. Part no. BM III
- BlastMate III Base Unit with all of the above accessories, no sensors. Part no. 714A0801
- Extra 1200 event memory option for a total of 1500 events. Part no. 714A2201
- Extra four channel option installed for a total of eight channels. Part no. 714A3101

MiniMate Plus



- MiniMate Plus Base Unit with 300 event memory capacity and four channels, internal triaxial sensor, installation spikes, Linear Microphone with stand, BlastMate III to PC Connecting Cable, Operator Manual, BlastWare III Compliance Module and Operator Manual, and AC adapter. Part no. MM Plus
- MiniMate Plus as above minus the Linear Microphone. Part no. 716A0401
- MiniMate Plus External (without Linear Microphone or Geophone) plus connectors for external sensors. Part no. 716A0403
- Extra 1200 event memory option for a total of 1500 events. Part no. 714A2201
- Extra four channel option installed for a total of eight channels. Part no. 716A1601

Standard Compliance Features:

- Zero Dead Time Between Events – never miss an event
- 1024, 2048, 4096 Constant Sampling Rate regardless of record time
- Two Year Warranty (requires factory calibration after one year)
- 500 Plus Second Record Times – allows capture of long events like trains.
- Auto Record Mode – continues to sample as long as data is above trigger level
- Up to 4 kHz Sampling Rate Standard – for unprecedented compliance accuracy
- Histogram Record Mode – supports pile driving or other long-term monitoring
- Fast, High Resolution Thermal Printer – quick readable results in the field (e.g. a typical event prints in less than 10 seconds)
- Compliance Reports for all Standards – full compliance reporting to national or local frequency standards
- Large Backlit Display – readable under any lighting condition
- Windows PC Software Included – transfers data, stores, and prints reports automatically
- Field Upgradeable at Any Time – new software features are being added continuously
- Rugged, Portable, Light Weight – easy to take out in the field and leave there
- Auto downloading of events to a PC
- 8 Channel Support – two seismographs in one or multiple locations of individual channels

Advanced Features:

Requires the BlastWare III Advanced Module, available separately. Part no. 714A4501.

- Provides near field or specialized monitoring
- Custom Language and Standards – create your own text and frequency standards

The **MiniMate Plus** offers the same features as the BlastMate III in a smaller and lighter package without the integrated printer. A PC or variety of printers can be connected to the MiniMate Plus. The simple keyboard can be used to easily access all settings and events.

VODMate™



The VODMate analyses the performance of an explosive's velocity of detonation and helps optimize blasting efficiency.

- Affordable, Easy-to-Use, and Highly Accurate
- Records multiple holes; measures up to 1 000 ft. (300 m) of VOD measuring cable
- Compatible with coaxial resistive VOD measuring cable from other manufacturers
- Up to 2 MHz Sampling Rate and 14 Bit Resolution – for precise recording
- Minimum trigger level of just 0.4% of cable length
- Automatic Setup – adjusts to sensor cable length
- Easy Cable Connecting – with self test to ensure reliability
- Small, Portable, Rugged, and Lightweight
- Timer Mode – to record only when you want
- Multiple Event Storage – in 4 MB permanent memory

- Single channel VODMate with carrying case, wire stripping tool, tape, coax lead-in cable. Part no. 717A0301
- Two channel VODMate with accessories as above. Part no. 717A0302
- Standard VOD measuring cable available in rolls of 1000 ft. (300 m). Part no. 71700101

VODModule

InstanTel also offers the VOD Module, which Connects to a BlastMate III or MiniMate Plus External (716A0403), for simple measurements of up to 325 ft. (100 m) of standard VOD measuring cable. Capable of recording at 65 kHz.

Series III Accessories



For More Information . . .

For more information, including a dealer near you, contact InstanTel. Information including product brochures, detailed specifications, and data sheets can be sent to you.

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Accessory Case



BlastMate case for carrying your accessories including one or two

- foam inserts can be customized to
- approximately 10.6 x 14 x 6.5 in.
- Part no. 714A2601

Customer Support

- Extensive worldwide dealer network
 - in-depth user documentation
 - comprehensive application support
 - free technical support
- Tel: Toll free 800267-9111 (United States and Canada)
or 613-592-4642
Fax: 613-592-4296
e-mail: bmservice@instanTel.com

For sales and application support, contact InstanTel and ask for BlastMate sales or Technical Support.

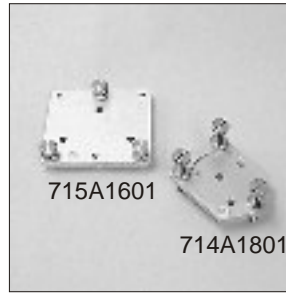
Standard Triaxial Transducer



Measures vertical, transverse, and longitudinal ground vibrations. Includes three spikes for soft surface installations. The transducer can also be bolted to hard surfaces including floor, wall, and ceiling installations.

- frequency range = 2 to 300 Hz
- amplitude range to 10 in./s (254 mm/s)
- includes 6 ft. (2 m) cable
- part no. 714A0301

Installation Plates



MiniMate Plus Fastening Plate for precise leveling requirements including ceiling and wall installations. Part no. 715A1601

Standard Transducer Leveling Plate with leveling feet and integrated spirit level. Can be used with floor, wall, and ceiling installations. Part no. 714A1801

Linear Microphone



Measures air pressure on the Linear L scale for air blast monitoring.

- range to 148 dB (500 Pa Peak)
- includes 6 ft. (2 m) cable
- part no. 714A0401

A Weight Microphone



Measures air pressure on the A Weight scale with impulse filtering for noise monitoring.

- range = 55 to 110 dB
- includes 6 ft. (2 m) cable
- part no. 714A2001

High Pressure Microphone



The High Pressure Microphone measures air pressure for close in or confined blasting.

- frequency range = 1 to 1000 Hz
- pressure range to 5.0 p.s.i. (34.5 kPa)
- includes 6 ft. (2 m) cable
- BlastWare III Advanced Module Software required
- part no. 714A5501

Microphone Stand / Microphone Windscreen



The Microphone Stand can be used with all Series III microphones. The stand is 35 in. (89 cm) long and made of three anodized aluminum rods. Part no. 714A3401

The Microphone Windscreen can be used with Series III microphones to reduce undesired wind noise. Part no. 33-1065FW

High Range 50 g & 500 g Accelerometer



Measures acceleration up to 50 g or 500 g for near field monitoring.

- frequency range = 1 Hz to 3 kHz
- range to 500 g (4903.3 m/s²)
- requires the BlastWare III Advanced Module Software, 002C10 accelerometer cable, Instatel accelerometer adapter part no. 714A5301
- optional triax mount part no. 080A11

Low Level 0.5 g Accelerometer



Measures acceleration for sensitive applications down to 0.00025 g minimum trigger.

- frequency range = 0.5 to 500 Hz
- range to 0.5 g (4.90333 m/s²)
- BlastWare III Advanced Module Software required
- 0.5 g Wilcoxon 731A accelerometer, with R6-2-J5A-6 accelerometer cable and instructions. Part no. 714A7101
- requires Instatel accelerometer adapter. Part no. 714A5301

High Frequency 28 Hz Uniaxial Geophone



Used for near-field high frequency monitoring applications.

- frequency range = 28 to 2000 Hz
- includes 6 ft. (2 m) cable
- BlastWare III Advanced Module Software required
- part no. 714A4101

VOD Module



Connects to a BlastMate III or MiniMate Plus to offer a spot check of velocity of detonation.

- measures up to 300 ft. (100 m) of VOD measuring cable
- requires 65 kHz sample rate
- requires standard VOD measuring cable available in rolls of 1000 ft. (300 m). Part no. 71700101
- BlastWare III Advanced Module Software required
- part no. 714A7201

Borehole Sensor



The Borehole Sensor lowers into a borehole to measure vertical, transverse, and longitudinal ground vibrations.

- frequency range = 2 to 300 Hz
- amplitude range to 10 in./s (254 mm/s)
- minimum 4.1 in. (104 mm) diameter borehole required
- includes 100 ft. (30 m) cable
- part no. 714A3301

Hydrophone Sensor



For underwater applications.

- senses pressure changes to 50 psi (345 KPa) to depths of 150 ft. (46 m)
- frequency range = 8 to 1000 Hz standard. 2 to 300 Hz using the optional Geophone Conditioning Box (part no. 716A1901)
- includes 200 ft. (60 m) cable
- BlastWare III Advanced Module Software required
- part no. 714A5001

4.5 Hz Uniaxial Geophone



For broad range compliance monitoring applications.

- frequency range = 5 to 350 Hz
- amplitude range to 10 in./s (254 mm/s)
- includes 15 ft. (4.5 m) cable
- standard connector part no. vertical - 714A4601, horizontal - 714A4602
- TNC connector version with no cable part no. vertical - 714A6501

Standard 8 Hz Uniaxial Geophone



Connects to all Series III monitors.

- frequency range = 8 to 300 Hz standard. 2 to 300 Hz using the optional Geophone Conditioning Box (part no. 716A1901)
- amplitude range to 10 in./s (254 mm/s)
- includes 15 ft. (4.5 m) cable
- part no. vertical - 714A4201, horizontal - 714A4202

Low Level Geophone



Vibration monitoring for bridges, buildings, traffic, and equipment.

- part no. 714A8301: amplitude range of 0.1 in./sec (2.54 mm/sec) and sensitivity of 16.113439 V/in./sec (0.634369 V/mm/sec)
- part no. 714A8302: amplitude range of 1.0 in./sec (25.4 mm/sec) and sensitivity of 1.6113439 V/in./sec (0.0634369 V/mm/sec)

Extension Cable Line Driver



For use with InstanTel's triaxial transducer when monitoring over very long distances. The driver increases the extension cable's immunity to noise.

- 30 m (100 ft.) part no. 714A7601
- 75 m (250 ft.) part no. 714A7602

Accelerometer Adapter



This adapter provides power and signal conditioning for ICP type accelerometers when connected to Series III monitors.

- includes 6 ft. (2 m) cable
- BlastWare III Advanced Module Software required
- part no. 714A5301
- contact InstanTel with your accelerometer requirements

Strain Gauge Adapter



This adapter can be used to connect a strain gauge to a BlastMate III or MiniMate Plus monitor.

- binding posts for easy connection
- BlastWare III Advanced Module Software required
- part no. 714A7301
- contact InstanTel with your strain gauge requirements

Universal Breakout Box



Used to adapt any sensor for use with the Series III monitors.

- binding posts for easy connection
- components can be added to tailor the signal to the desired range and frequency response
- part no. 716A2001

Custom Sensors and Adapters



At InstanTel, we strive to provide solutions to your needs. If you have a special requirement, contact us. Our job is to keep you happy!

InstanTel can provide custom sensors and adapters to your requirements. Contact InstanTel for more information.

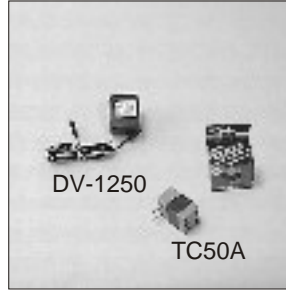
External 12 VDC Battery Power Supply Cable



Connects to a standard 12 VDC automobile type battery, or plugs directly into a standard automobile power output (cigarette lighter), to supply power to the BlastMate III or MiniMate Plus.

- Part no. 714A2401

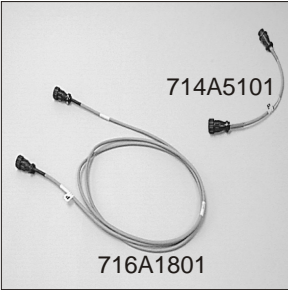
AC Adapter / 220 VAC Adapter



BlastMate III and MiniMate Plus AC Adapter for use with 110 VAC electrical power supply systems. Part no. DV-1250

BlastMate III and MiniMate Plus 220 VAC Adapter for use with 220 VAC electrical power supply systems. Requires the AC adapter (part no. DV-1250). Part no. TC50A

MiniMate Plus to BlastMate III Cable / Uniaxial to Geo Adapter



Uniaxial to Geo Adapter converts uniaxial sensor readings from channel 4 to 1 or channel 8 to 5. Part no. 714A5101

MiniMate Plus to BlastMate III Cable allows communications between a MiniMate Plus and a BlastMate III. Includes 8 ft. (2.5 m) cable. Part no. 716A1801

Triax Uniax Splitter Cable / Quad Splitter Cable



Triax Uniax Splitter Cable for use with 8 channel monitors to connect a triaxial and uniaxial sensor. Part no. 714A3901

Quad Splitter Cable for use with 4 or 8 channel monitors to connect uniaxial sensors. Part no. 714A3201

Remote Alarm



Used for indicating normal and over-triggering remotely.

- two programmable alarm levels
- capable of powering sirens, lights, or other alarm indicators
- includes 15 ft. (4.5 m) cable
- part no. 711A1401
- Optional splitter cable to use the Remote Alarm and a serial port simultaneously. Part no. 712A3501

DS-20 Wire Trigger / Series III Trigger Cable



The DS-20 Wire Trigger starts monitoring automatically when a wire makes or breaks a connection. Two conductor 22 AWG wire required. Part no. 677A9601
The Series III Trigger cable allows any monitor to trigger up to five other monitors simultaneously. One cable required for each monitor. Two conductor 22 AWG wire required. Part no. 712A3901