

# SPEEDTRAP™ VELOCITY RECORDER

ACCURACY: 0.1 MICROSECOND.  
CHANNELS: 2 (START AND STOP).  
SENSORS: WIRE BREAK AND/OR FIBRE OPTIC.  
EXPLOSIVES SAMPLES: 1 SAMPLE PER TEST.  
EXPLOSIVES IN BLASTHOLES: 1 BLASTHOLE PER TEST.  
DISPLAY: MONO, 4 X 20 CHARACTERS.  
PC INTERFACE: RS232, DB9 FEMALE CONNECTOR.



DISTANCE: 50cm  
TIME: 104.20µs  
VELOCITY: 4798m/s  
BATTERY LEVEL: 100%



- Affordable, easy to use and portable.
- Instant display of velocity results.
- Onboard memory for 100 tests.
- Auto-sense wire break and/or fibre optic.
- PC interface for results download.
- Minimal consumables and operational cost.
- MREL's 1 year Comprehensive Parts & Labour Warranty.

MREL's SpeedTrap™ Velocity Recorder is the world's most modern discontinuous (point-to-point) velocity recorder. It is used by explosives manufacturers and explosives consumers to instantly display and save the velocity of all types of industrial and military explosives, propellants, pyrotechnics, detonating cords, boosters and shock tubes.

It is the ideal recorder for instant infield or laboratory determination and display of the velocity of energetic products. For example, the Operator can take a sample of bulk explosive at a mine and test the sample's average velocity of detonation (VOD) prior to allowing the explosives truck to load blastholes. Another example is laboratory velocity testing of energetic materials as part of a research or factory quality control program.

The SpeedTrap™ Velocity Recorder features a high precision timer with 0.1 microsecond accuracy and two input channels, one to start the timer and one to stop the timer. One unique feature of the SpeedTrap™ Velocity Recorder is that it auto-senses whether the Operator is using wire break or fibre optic cable to signal the timer or even a mix of both types of signals in one test. MREL provides all the necessary firmware and associated cables.

All settings are made and test results immediately displayed on the built-in LCD. The LCD displays the distance between sensors, the time taken between sensors and the velocity. It allows the results to be printed and saved into internal memory for review or downloading to a PC.





## SPEEDTRAP™ VELOCITY RECORDER SPECIFICATIONS:

**System Components Provided:** SpeedTrap™ Velocity Recorder, SpeedTrap™ Universal Sensor Cable (30 m long, 2 ea.), SpeedTrap™ Connector Hub, SpeedTrap™ Battery Charger, padded SpeedTrap™ Carry Case, SpeedTrap™ Operations Manual (English).

**Clock Speed:** One sample every 0.1 microseconds.

**Onboard Memory:** Ability to save 100 test results.

**Size and Weight:** 21 x 17 x 9 cm (8.3 x 6.7 x 3.5 in.) 2 kg (4.4 lbs.).

**PC/Printer Connection:** RS-232 Communication Port.

**Warranty:** MREL's 1 year Comprehensive Parts and Labour Warranty.

**Technical Support:** MREL's Unlimited Technical Support Program by secure customer portal, email, and telephone.

## OPTIONS:

**SpeedTrap™ Fibre Optic Firmware c/w 2 Transducers:** Allows the Operator to measure velocity using fibre optic sensors.

**SpeedTrap™ Break Wire Firmware c/w 2 Connectors:** Allows the Operator to measure velocity using break wire sensors.

**SpeedTrap™ Adjustable Distance Firmware:** Allows the Operator to input the distance between the sensors as opposed to the standard fixed distance.

**SpeedTrap™ Compatible Portable Printer:** Allows the Operator to print results directly from the SpeedTrap™ Velocity Recorder without PC.

**SpeedTrap™ Software for Windows:** Allows the Operator to download and save and display data on a PC running Windows.

## ACCESSORIES:

**SpeedTrap™ Fibre Optic Cable Sensor:** Compatible with SpeedTrap™ Velocity Recorders containing the SpeedTrap™ Fibre Optic Firmware. Provided on a 100 m (328 ft.) spool.

**SpeedTrap™ Break Wire Sensor:** Compatible with SpeedTrap™ Velocity Recorders containing the SpeedTrap™ Break Wire Firmware. Provided on a 768 m (2520 ft.) spool.

The SpeedTrap™ fully complies to the requirements of the following standards: EN 13630-11: Determination of velocity of detonation of detonating cords; EN 13630-12: Determination of burning duration of safety fuses; EN 13631-14: Determination of velocity of detonation; EN 13763-23: Determination of the shock-wave velocity of shock tube.

