



# The Next Generation in Permanent Monitoring!

**NEW HARDWARE, NEW SOFTWARE, NEW FUNCTION.**

Easier to use than ever!

Texcel's next generation monitors feature zero crossing frequency, no down time in recording, and processing of all event data within the monitor, including ground vibration, peak vector sum and Vibration Dose Value (VDV). Texcel's next generation in monitors are backed by Texcel's all-new next generation T-Link software.

*The ETM-PI complies with the International Society of Explosives Engineers (ISEE) Performance Specification for Blasting Seismographs.*



## **AUSTRALIAN DESIGN, MANUFACTURED AND OWNED**

Fully designed and developed in Brisbane Australia

Texcel's ETM-PI delivers unmatched versatility for vibration and blast monitoring in one rugged, precision engineered, self contained instrument. A large choice of sensors, foolproof set up, simple operation backed by technical support and Texcel's proprietary T-Link software are some of the features of the ETM-PI's advanced design. Combined with a lifetime warranty, and rental as well as purchase options, the ETM-PI provides real benefits to its users.



## FEATURES

### Easy PC communication

RS232 serial interface or a USB port (using serial adapter cable).

### Large backlit LCD

Readable under all lighting conditions.

### Directional keypad

For simple navigation through the ETM-PI's menus.

### Power supply

The ETM-PI draws power from long life internal batteries or from its own solar panel, making it suitable for operation in almost any location.

### Standard 32-bit processor

Provides sampling rates up to 40KHz.

### Standard 16 Mbyte onboard memory

Allows thousands of waveforms and ten of thousands of events to be stored.

### Threshold triggered events and waveforms

Results are available without interrupting continuous monitoring mode.

### Monitor Enclosure

Texcel's ETM-PI's enclosure is of a vandal proof double lock design, constructed using stainless steel. The enclosure pole is mounted at a convenient height for manual data retrieval and servicing and installed on a concrete footing offset from the geophone to avoid spurious vibrations.

### Zero Crossing Frequency

Results are available in all reports and all events.

### Event data

All event data is processed within the monitor, including ground vibration, peak vector sum and **Vibration Dose Value (VDV)**.

### Overpressure Circuitry

The ETM-PI incorporates circuitry to detect peak overpressure, providing a 100µs detector onset time as required by many Environmental Authorities.

### Trigger on vector sum threshold.

Vector sum result in continuous mode.

### No down time

Event processing does not interrupt recording.

### Duty timetables

Duty timetables allow you to program the ETM-PI to sleep when not required for more efficient power usage. The ETM-PI's extremely low power consumption means up to 30 days continuous operation between battery charges.

### Modem

Optional on-board modem (GSM or Next G protocols) with antenna provides remote monitor communication functions. This opens up opportunities for long term remote site monitoring and unattended operation, with consequent cost savings in staff labour.

### Wirebreak trigger and trigger synchronise

For even more built-in capability these functions are a standard feature of the ETM-PI.

## SENSOR OPTIONS

### Standard triaxial geophone

Features a frequency bandwidth of 4.5 Hz to 500 Hz is supplied with both an aluminium baseplate and soil spikes to couple with all surfaces.

### Low frequency triaxial geophone

Available in 1 Hz or 2 Hz models where strict compliance monitoring parameters are required.

### Uniaxial 28 Hz and 14 Hz geophones

Also available, uniaxial geophones ranging up to 1000 mm/sec PPV, for near field diagnostic monitoring of underground mining and surface blasts plus HS-1 high range geophones.

### Triaxial Accelerometer

Required to measure Vibration Dose Value (VDV).

### Linear weighted microphone (2Hz to 500 Hz)

Measures to 140 dBL at a resolution of 0.1 dBL, accurately capturing overpressure (airblast) data from blast events and 'A' weighted percentile sound levels. The microphone is protected from the elements by a hydrophobic wind sock. Mic channel alternatively can be used for another geophone or accelerometer.



#### HEAD OFFICE - BRISBANE

24 Bank Street  
West End Queensland

PO Box 3699 South Brisbane  
QLD 4101 Australia

**PHONE** +61 7 3237 8111  
**FAX** +61 7 3237 8188  
**EMAIL** team@texcel.com.au  
**WEB** www.texcel.com.au