# environmental SCIENCE

#### AND TECHNOLOGY

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## **Turnkey** Instruments Ltd

# Site Compliance Monitor CM3

### The Vibrosound Analyser

**Model CM3** is the latest in the series of vibration and noise monitoring equipment, uniquely combining vibration monitoring with type 1 precision grade sound/ leq. analysis in a light weight and easy to operate portable unit.

- Site Compliance Monitoring CM3 available in Simultaneous (Vibration & Noise type 1 Leq.'s) or Vibration /Noise only. Option to include Wind Speed and Direction.
- Designed to provide the user with a fast accurate and efficient method of ensuring compliance with product limits for both Noise and Vibration levels. Tabulation of results down to 5 minute with direct exporting to excel of graphs and reports.
- Automatic unattended monitoring.
- Automatic data downloading.
- Full remote data monitoring with modem option with SMS text alerts (Noise and Vibration)
- Multiple Event storage
- Display to view live values and to review previous results
- The latest windows software to enable automatic downloads, giving virtual real time remote data

**All instruments** meet or exceed the relevant standards including BS6472 & BS5228 (Noise), the unit also gives 5 Minute values to comply with BS41412 (Noise). Each unit also ensures compliance with the regularory bodies project limits.

#### **Standards**

Vibration: BS6472, BS7385. BS6955 and DIN 4150 Noise: BS4142, IEC651, BS5228, BS5969 and ANSI S1.4,

IEC61672:2002







## Site Compliance Monitor CM3 - The Vibrosound Analyser

This fourth generation Vibrosound Analyser Model CM3 is the most simple and reliable way to monitor your site for compliance Noise and Vibration legislation. Available in simultaneous (Vibration & Noise Type 1 leq.s) or Vibration/ Noise only.

Intelligence with simplicity

Model CM3 allows full Remote Data Collection for unattended monitoring. Stay in charge with SMS text alerts on multiple users specified limits and site alarms.

#### **Features**

- Leq. Type 1 Noise and Vibration Simultaneous
- Dual internal batteries and external power lead
- Alarm Options for site alerts (Audio +Visual)
- Up to 7 channels
- Unlimited Vibration cables length
- Remote data collection, automated at the users periods
- Weather monitoring (wind, speed and direction)
- Lae5 for compliance with the very latest standard
- Factory option of 32GB memory storage
- Many options to suit all applications

Powered by Surewave Technology Ltd.

## Specifications Input range:

#### Vibration:

0.01 to 99.8mm/S Velocity. Resolution 0.01mm/S Noise:

Dynamic Range 60dB (10dB below base 50dB above base) minimum.

Base Selectable: 20, 40, 60, 80, 100

Resolution: 0.1dB accuracy 0.5dB Meeting Type 1

Precision grade. Standard Value:

Leq., Lmax, Leq5, Percentiles: L10 L90 Factory option: L1

#### **Trigger Levels (Impulse Mode):**

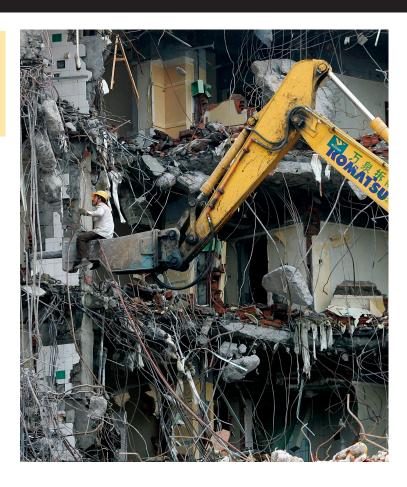
User Selectable:

Vibration: 0.1 to 100m/S Velocity.

Sound / AOP: dB Above Metre base (linear)(ON or OFF)

#### Cut off delay (Impulse Mode):

User-selectable from 0.1 to 1 second. Used to reduce event length if event fall below trigger level for more than selected delay.



#### Sampling Rate (Impulse Mode):

Vibration: User-specification from 200 to 1000Hz. Impulse mode only

#### **Event length (Impulse Mode):**

User-selectable – From 0.1 up to 60 seconds with out flash card option.

Automatic calculations of maximum length available (depending on number of channels. Sampling Rate and memory installed.

#### **Frequency Response:**

Vibrations: 0.5Hz to 1kHz, with standard accelerometers. Noise: A or C weighted, Linear for Air Overpressure to IEC651.

#### Memory:

Event data ram:384KB. Option of 32GB Protected by a separate battery. User information store for 4 fields

12 characters/field. All user-selected options have separate data retention

for up to 10 years after each event save.

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#### **Standard Channels:**

Vibrations only: 3 channels (1 triaxial or 3 single axis transducers)

or 6 channels (2 triaxial or 6 single axis transducers) Noise only: Single channel,

Type 1 Precision Grade microphone.

Simultaneous Noise and Vibration: 4 or 7 channels (1 Noise Channel + 3 or 6 Channels of Vibration)

#### Print-out (external option):

User-selectable

None: Only valid with PC or flash card option.

Block results: Vibration: Displacement, Acceleration,

Velocity, Frequency. Resultant Velocity

Noise: Air overpressure (leq. in the continuous mode):

Leq. Of overall, Max 5 min, leq. (Interval), L10, L90 percentiles

Lmax, etc (see Surewave leaflet) in sound only mode

SPL mode (from Calibration menu)

Full: As block with additional user data. Velocity and Air Overpressure graphs or PPV and Leq. Histograms

#### **Transducers:**

Vibration: TA1 (3 accelerometers, mounted triaxially) or VT1

(single accelerometer) as required. Cable length unlimited (POA)

Noise: Type 1 Precision Grade Microphone for Leq. Noise. Linear sub

4Hz for AOP Overpressure data. Remote mounting up to 10M

#### **Standards**

Vibration: BS6472, BS7385. BS6955 and DIN 4150 Noise: BS4142, IEC651, BS5228, BS5969 and ANSI S1.4, IEC61672:2002

The specification contained in this leaflet are the subject to change due to further development of the product. Please contact our sales office on 01606 330020 for the latest specification.





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