SureWave Technology Ltd



SITE COMPLIANCE MONITOR CM3



Designed by SureWave and manufactured by Magus Electronics, this fourth generation Vibrosound Analyser Model CM3 is the most simple and reliable way to monitor your sites for compliance for both Noise and Vibration legislations. Available in Simultaneous (Vibration & Noise Type 1 Leqs) or Vibration/Noise Only.

INTELLIGENCE WITH SIMPLICITY

Model CM3 allows full Remote Data Collection for unattended monitoring.

Stay in charge with live data on your Mobile or PC. User specified limits and alarms.





FEATURES

- Leg Type 1 Noise and Vibration Simultaneous
- Dual internal batteries and external power lead
- Alarm Option for site alerts (Audio + Visual)
- Up to 7 channels
- Unlimited Vibration cable lengths
- Remote live data collection, fully user configurable
- Weather monitoring (Wind speed and Direction)
- Lae5 for compliance with the very latest standards
- IP option with 1GB memory storage for events
- Many options to suit all applications

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S P E C I F I C A T I O N S

INPUT RANGE:

VIBRATION:

 $0.01\ to\ 99.8 mm/S$ Velocity. Resolution 0.01 mm/S . V, L & T PPV with frequency. Allows eVDV calculation.

NOISE:

Dynamic Range: 60 dB (10dB below base 50dB above base) minimum. Base Selectable: 20, 40, 60, 80, 100.

Resolution: 0.1 dB accuracy 0.5 dB Meeting Type 1 Precision grade .

Standard values:

Leq, Lequibletime, Lmax, Leq5, Percentiles: La1, 10, 30, 50, 90 & 95. User selectable at any interval / value required.

TRIGGER LEVEL (Impulse Mode):

USER SELECTABLE:

Vibration: 0.1 to 100mm/S Velocity.

Sound / AOP: dB Above Meter 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 falls below trigger level for more than selected delay.

SAMPLING RATE (Impulse Mode):

VIBRATION: User-selectable from 200 to 1000Hz. Impulse mode only.

EVENT LENGTH (Impulse Mode):

User-selectable - from 0.1 up to 60 seconds without Flash Card Option. Automatic calculation of maximum length available (depending on number of channels, Sampling Rate and memory installed).

FREQUENCY RESPONSE:

VIBRATION: 0.5Hz TO 1KHz, with standard accelerometers. **NOISE:** A or C weighted, Linear for Air Overpressure to IEC651.

MEMORY:

EVENT DATA RAM: 384KB for impulse events. 1GB IP option as STD. 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.

STANDARD CHANNELS:

VIBRATION 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).

DISPLAY VALUES ON THE SCREEN:

During the event, current Peak Vibrations and Noise values.

End of the event:

VIBRATION: Displacement, Acceleration, Velocity, Frequency, Resultant Velocity.

NOISE: Air Overpressure (Leq in the Continuous Mode): Leqs of Overall, Max 5 min, Leq(interval), Max 5 (interval), L10, L90 Percentiles, LMAX. Additional user definable interval for Leq, Max 5 min Leq, L10, L90 in Sound only mode. SPL mode (from Calibration menu).

TRANSDUCERS:

VIBRATION: TA1 (3 accelerometers mounted triaxially) or VT1 (single accelerometer) as required. Cable lengths unlimited (POA) NOISE: Type 1 Precision Grade Microphone for Leq noise. Linear sub 4Hz for Air Overpressure data. Remote mounting up to 10M.

STANDARDS:

VIBRATION: BS6472, BS7385-2, and DIN 4150.

NOISE: BS4142, BS5228, BS EN 60651 and ANSI S1.4 Type 1.

The specifications contained in this leaflet are subject to change due to further development of the product. Please contact our sales office on 01270-757900 for the latest specifications.

IP OPTION - via any web browser - Mobile / PC:

Giving remote data access and SMS Text / Email Alerts on multiple alarm levels and 'Real Time' remote readings fully user selectable. Live Graphs user configurable. SWIP - Data is sent using a POST to the Customers web server. No ongoing charges. IP Nano - We provide a hosted web server / site and SIM card. Annual fee.

Demo login for IP Nano available on request.

MODES:

AUTOMATIC TRIGGER (IMPULSE) MODE:

Triggers on any vibration exceeding the user defined trigger value. Used for blast monitoring or similar events. Event length user selectable.

CONTINUOUS MODE:

Used to record Peak Vibration and Sound Leq (in dB(A) or (C)) over extended periods. Manual or automatic operation using 3 event timer, repeated daily. Data tabulated at user defined intervals. Ideal for Noise surveys and monitoring of construction operations to ensure compliance with project limits. Applications include: Piling, Railway, Highway and Bridge Structure Monitoring.

GENERAL:

Real Time Calendar/Clock for Date/Time print-out with results and 3 event timer per day for unattended operation of several weeks.

LCD Graphic Display for results and recall of graphs etc.

2 level Audible and visual Alarm system warning if trigger level is exceeded in either mode of operation.

SMS Text / Email Alerts with IP option. Multiple Alarms: Noise / Vibration

Alarm on any recorded value all user selectable via the web interface.

Weather Option to give wind speed/direction, more details available on request.

User-friendly software - Features include: Reprinting Event; 1Min Pause;

Battery/Mains operated.

Battery life (up to): light weight option 3 days, extended option 6 days. External battery connection with lead supplied for extended or permanant use (cycle external batteries). Internal battery can be changed by the user.

IP option or Computer interface (RS232) and Windows P.C. Software supplied as standard.

Supplied in a water-tight Peli Case, sealed to IP65.

Weight 10.5kg (4 Channel System with one Vibration Sensor and Microphone).

OPTIONS:

VT1 single axis transducers with trigger option on selected channel. Alternative transducer mounting plates/blocks.

INSTRUMENT CONFIGURATION:

Sound only, Vibration only or Combined Sound and Vibration (Vibration 3 or 6 channels). Ip or Modem.

SUPPLIED AS STANDARD WITH THE FOLLOWING:

Mains Charger + External battery connector and cable.

Windows Software (Windows 10, 7, XP,2000, ME,98SE,&98) USB 1.1 (Type A to B) cable supplied.

V1.23

SureWave Technology has a policy of continuous product development and reserves the right to vary the specifications