NATA
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Vibracord Tellus

VIBRATION METER

acoem
CREATING ENVIRONMENTS OF POSSIBILITY

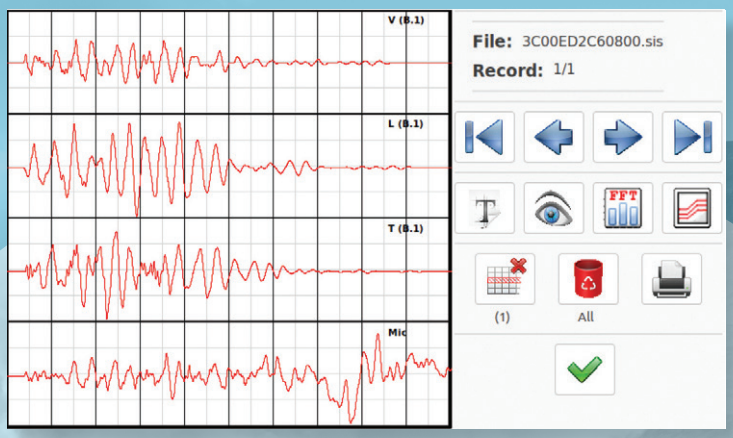
Introducing the Vibracord Tellus vibration meter – the perfect instrument to complement the extensive Acoem blast monitoring product range

The Vibracord Tellus vibration meter is ideal for short-term monitoring projects as a stand-alone system that measures vibration levels caused by the blasting process.

With an IP65 rating, this lightweight (3 kg) and portable unit is ideal for use in all environmental conditions, and is especially suited for use in construction, mining, demolition, or other jobs where vibration cannot be completely avoided.

The vibration meter comes in its own carry case and runs on either internal rechargeable lithium-ion batteries or a 12V power supply. It can be deployed quickly and easily in the field and comes standard with a certificate of calibration.

It is equipped with a triaxial geophone for measuring three vibration waves (vertical, transverse and longitudinal) and one linear microphone to measure air blast. It also accurately measures velocity, acceleration, pressure and voltage.



The vibration meter's GPS module provides position information and synchronizes the clock of all the working equipment for precise timing analysis. A single unit can support up to seven channels as well as an additional seven 'virtual channels' and store up to 30,000 records.

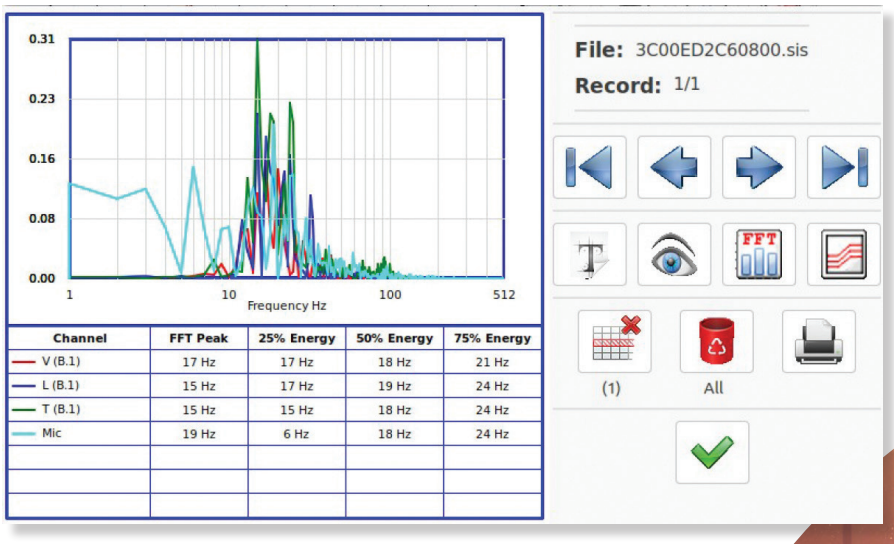
Results are displayed in real time on the meter's TFT graphic screen interface, and the optional communication module allows for remote access and unattended operation. Data captured by the unit can be transferred via a variety of methods, including USB, network and remotely via the internet.

Notifications can be configured to notify the user when programmable alert levels are exceeded.

The Vibracord Tellus vibration meter is available exclusively in Australia from Acoem Australasia. It is fully supported by the dedicated Acoem Environmental Reporting Services (ERS) team and its expert field service engineers.

Trusted & proven equipment for all your vibration measurement requirements

- 7” TFT graphic screen with touch panel
- User-friendly & intuitive visual interface, allowing graphic visualisation of every record, even the FFT
- Integrated 8-key membrane keyboard works in harmony with the touch panel
- Powerful configuration options give you control over vibration recordings
- Up to seven channels with multiple transducers configuration
- Generate .pdf reports directly from the Tellus

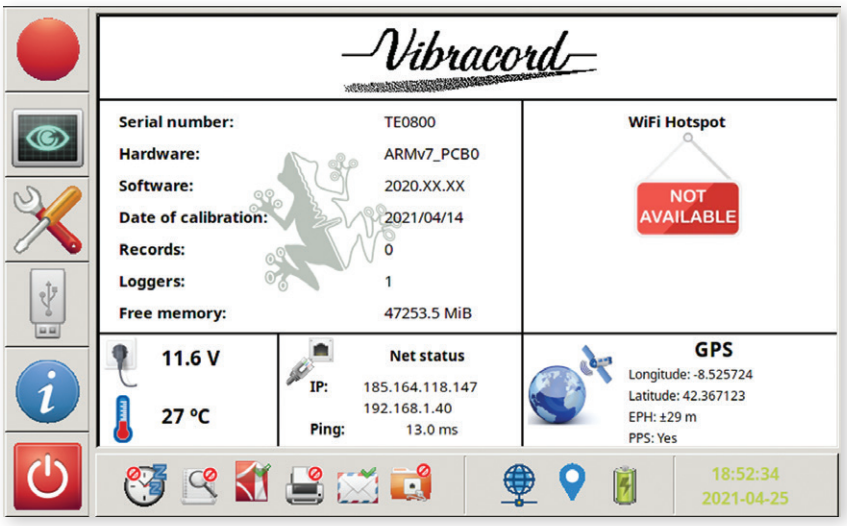


Channel	FFT Peak	25% Energy	50% Energy	75% Energy
V (B.1)	17 Hz	17 Hz	18 Hz	21 Hz
L (B.1)	15 Hz	17 Hz	19 Hz	24 Hz
T (B.1)	15 Hz	15 Hz	18 Hz	24 Hz
Mic	19 Hz	6 Hz	18 Hz	24 Hz

- Measures in velocity with geophones. Other transducers & magnitudes like acceleration, pressure & voltage can also be measured
- One channel for low frequency sound pressure with FFT performed in the equipment itself
- 2 – 250 Hz frequency response
- Standard shown in the own equipment
- Flexible date capture including USB, web server, FTP server & automatic upload (SFTP).

Specifications

Number of channels[1]	Single Geophone, Optional 2nd Geophone, 1 x Microphone, 7 virtual
Sampling rate (samples per second)	2048
Analogue to Digital Converter	16 bits
Data storage memory	16 GB
Frequency range	2 – 250 Hz (ISEE), 1 – 315 Hz (DIN45669)
Record time	1 – 32 seconds in increments of 2 seconds
Trigger mode (In automatic mode, each channel is independently configurable)	Automation, Manual, External
Record modes	Waveform, Bar graph, Waveform & Bar graph
Data transfer ports	Ethernet, USB (external disk)
Data visualisation	Display, Printer, WEB server, FTP server, Email
External power supply	12 V
Internal power supply	Li-ion battery
Autonomy	24 hours
Keyboard	Touch panel, 8 key membrane



[1] Physical channels take the signal from the connected transducer. Virtual channels take the output of the physical channel and process it mathematically to create a new signal.

Physical & environmental[1]

Protection	IP65
Dimensions (mm)	270 x 230 x 100
Weight (without accessories)	3 kg
Working temperature	-15 to 50 °C
Storing temperature	-20 to 60 °C
Working humidity	Without condensation
Storing humidity	Without condensation

Communication Option

The communication module allows the remote operation from everywhere.

- LAN (RJ45) cable and internal modem connection
- WiFi wireless connection
- User friendly WEB server to control the equipment
- FTP server for fast download
- FTP and SFTP data for upload
- Download PDF reports directly from the WEB interface
- Send an email when the programmable alerts are exceeded
- Configure different email addresses with different alarm levels
- Attach a PDF report to emails
- The WEB and FTP servers are integrated into the Tellus equipment. There is no need for external WEB or FTP servers
- Power supply and environmental conditions are motorized by equipment.

Specification Standards

Complies with AS2187.2.2006, USA USBM & OMSRE.

REAL TIME DATA		
Channel	Current values	Maximum values
Channel. Geophone (2-250 Hz) (Vertical)	0.04 mm/s (79 Hz)	3.93 mm/s (256 Hz)
Channel. Geophone (2-250 Hz) (Longtitude)	0.03 mm/s (28 Hz)	0.07 mm/s (3 Hz)
Channel. Geophone (2-250 Hz) (Transverse)	0.03 mm/s (57 Hz)	0.08 mm/s (3 Hz)
Channel 7. Microphone (dBL)	0.08 Pa / <80 dB (341 Hz)	0.13 Pa / <80 dB (38 Hz)
PVS Block 1	0.07 mm/s	3.93 mm/s

MENU ITEMS
Show equipment status
Show configuration
Change configuration
Real time data
Recording control
Show data
Download data
Delete records
Security

EQUIPMENT STATUS	Serial Number: TE0900
Capture status:	Equipment is recording in bargraph mode
Records stored:	0
Loggers files:	1
Memory free:	16.61 GB
DC Power supply:	11.7 V
Equipment temperature:	29 ˚C (Working range: -15 ˚C to +65 ˚C)
Date & Time:	Tuesday, February 02 2021 . 23:50:27
Time zone:	Europe / Madrid (CET, +0100)
Date of calibration:	Sep-25-2020
Location:	Longtitude: -8.525824 Lattitude: 42.367144

Analysis program included with the vibration meter

- Advanced analysis software designed for productivity and complete printed reports
- Manage your records with a summary in a grid, select them and print the full report with only one click
- Analyse waveform, timing and amplitude values; perform the FTT in the desired part of the record; apply mathematical functions to records as filters, integration and RMS; and so much more
- Select the standard to use and include it in reports
- Regression analysis model included
- Calculate the distance – charge model with the data from previous records.

Reports

Generate integrated, printed reports direct from the Tellus Monitor:

- Data summary
- Logger
- Text summary
- Graphic summary
- Detailed wave
- FFT
- Filter
- Derivative
- Integration
- RMS
- Standard.

Managed blast solutions

DynaMaster®

For mines and large projects, Acoem Australasia also offers a managed blast system called Dynamaster®.

Dynamaster is a fully-integrated hosted package which combines robust in-field blast monitors with comprehensive web-based software to ensures 100% data capture.

The Acoem Dynamaster system is also designed to relieve your team members of the day-to-day tasks involved in blast monitoring.

With a "set and forget" approach, once the unit is placed in the field and switched on, data is sent via mobile communication to a central server where it's uploaded to the website and sent to you via SMS and/or email.

Acoem Australasia takes care of day-to-day monitoring so you can reduce site management activities and costs

Timely access to data allows you to assess if exceedance levels have been breached or perform test triggers to check conditions before proceeding with a blast.

With increasing public concern and regulatory scrutiny, it's more essential than ever that your blast monitoring works seamlessly and effectively. That way you can keep working to schedule, without interruptions.

About Acoem

At Acoem, we **create environments of possibility** – helping organisations find the right balance between progress and preservation – safeguarding businesses and assets, and maximising opportunities while conserving the planet's resources. We deliver unrivalled, interoperable AI-powered sensors and ecosystems that empower our customers to make enlightened decisions based on accurate information.

Together with 220 distributors, our 850+ employees work across 28 offices, 6 manufacturing facilities and 5 R&D centres in 9 countries, to provide trusted, holistic data solutions for customers worldwide.

Acoem links possibilities with protection.

For more information visit acoem.com.au

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