EPC GROUPE VIBRAQUIPO

Vibration meters

VIBRACORD

Enabling
mineral
sustainability

Tellus

## The perfect equipment for your requirements in vibration measurement

7" TFT graphic screen with touch panel.

The visual interface with the touch panel is friendly and intuitive, allowing the graphic visualization of the record, even the FFT.

A 8 keys membrane keyboard is included, working together with the touch panel.

The powerful configuration options allow you a perfect control over the vibration recording.

Up to seven channels plus seven 'virtual channels'. Multiple transducers configuration is allowed.
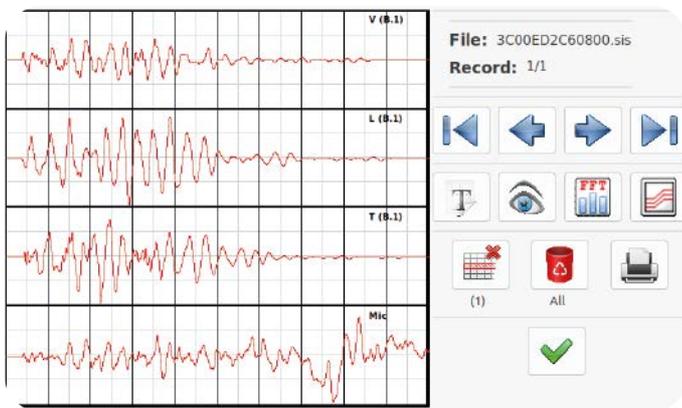
File: 3C00ED2C60800.sis
Record: 1/1

VIBRAC◯RD

VIBRAQUIPO

C/ Gaiteiro de Soutelo, 3 Bajo
36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

vibraquipo@vibraquipo.com
www.vibraquipo.com

Enabling
mineral
sustainability

Tellus

The standard equipment measures in velocity with geophones, but other transducers and magnitudes like acceleration, pressure and voltage can be measured.

One channel for low frequency sound pressure.

FFT performed in the equipment itself.

Several ways to transfer the captured data, like USB disks, network and remote access from the Internet.

	Maximum	Frequency
V (B.1)	3.62 mm/s	22 Hz
L (B.1)	7.51 mm/s	19 Hz
T (B.1)	7.36 mm/s	17 Hz
Mic	7.30 Pa / 111.2 dB	3 Hz
Vsum 1	8.27mm/s	t = 556 ms
2021/01/15 - 12:24:40 (2 s) P.1		

File: 3C00ED2C60800.sis
Record: 1/1

Frequency response:

2-250 Hz
1-315 Hz

VIBRAC●RD

VIBRAQUIPO

C/ Gaiteiro de Soutelo, 3 Bajo
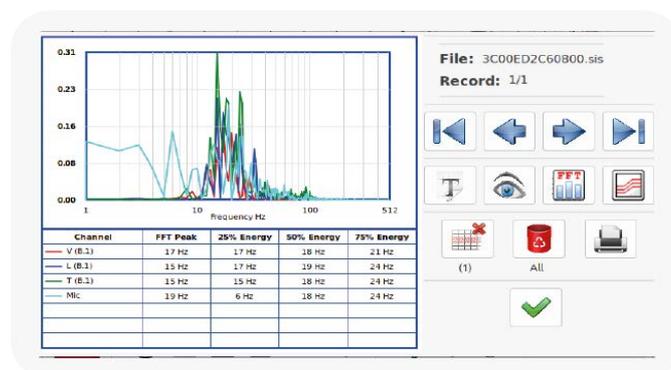36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

vibraquipo@vibraquipo.com
www.vibraquipo.com
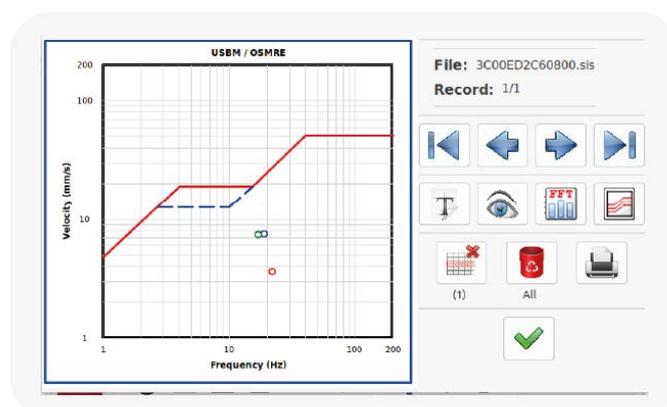
Enabling
mineral
sustainability

Tellus

The GPS module provides the position and synchronizes the clock of all the working equipment for a precise timing analysis.

The FFT is performed in the own equipment. The results are given in real time.

The communication module allows the remote access and unattended operation of the equipment.

The Standard compliance can be easily checked in the own equipment screen.

VIBRAQUIPO

C/ Gaiteiro de Soutelo, 3 Bajo
36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

vibraquipo@vibraquipo.com
www.vibraquipo.com

Enabling
mineral
sustainability

Tellus

The communication module allows the remote operation from everywhere

- LAN (RJ45) cable and internal modem connection.

- Wi-Fi wireless connection.

- User friendly WEB server to control the equipment.

- FTP server for a fast download.

- FTP and SFTP data upload.

- Download pdf reports directly from the WEB interface.

- Send an e-mail when the programmable alert levels are exceeded.

- Configure different email addresses with different alarm levels.

- Attach a pdf report to the email.

- The WEB and FTP servers are in the equipment itself. No need to depend on the manufacturer.

- Power supply and environmental conditions are motorized by the equipment.

Menu:

- 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: Longitude: -8.525824 Latitude: 42.367144

REAL TIME DATA

Channel	Current values	Maximum values
Channel 1. Geophone (2-250 Hz) (Vertical)	0.04 mm/s (79 Hz)	3.93 mm/s (256 Hz)
Channel 2. Geophone (2-250 Hz) (Longitude)	0.03 mm/s (28 Hz)	0.07 mm/s (3 Hz)
Channel 3. Geophone (2-250 Hz) (Transverse)	0.03 mm/s (57 Hz)	0.08 mm/s (2 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
Last trigger at: 02:10:10		
Return to VibraWEB main page		

Gaia

Equipment with a rough design for all environmental conditions

Strong aluminum case.

High contrast illuminated LCD screen for a perfect view under all light conditions.

Specially designed for construction work and blasting monitoring.

One 3-Axis block of geophones. One Microphone for air-pressure (optional).

The captured data is transferred to an SD card.

Very easy to use. Recommended for users that don't need advanced options in vibration measurement.

This equipment inherits the power of the Digital Signal Processing of its big brother Vibracord Tellus, for an extremely accurate vibration recording.

Frequency response:
2-250 Hz
1-315 Hz

VIBRACORD

VIBRAQUIPO

C/ Gaiteiro de Soutelo, 3 Bajo
36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

vibraquipo@vibraquipo.com
www.vibraquipo.com

Enabling
mineral
sustainability

Borehole geophone

- 3-Axis geophone designed to be used inside a borehole.

- Compatible with all Vibracord models.

- Designed to be lowered into a borehole to measure the ground vibration.

- It is necessary to cement the borehole.

Technical Data		
Standard	**Frequency range**	**Cable length**
DIN45669	1-315 Hz	25 m
ISEE	2-250 Hz	25 m
High frequency	30-1000 Hz 8–1000 Hz	25 m
Weight and size		
Weight	700 g	
Size	150 mm length - 50 mm	

VIBRACORD

Enabling mineral sustainability

Software

The analysis program is included with all the vibration meters

The same software for all models!

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.

Analyze the waveform, timing, amplitude, values, perform the FFT in the desired part of the record, apply mathematical functions to the records, as filters, integration, derivative and RMS, and much more.

Reports

It is possible to generate the following printed reports:

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

VIBRAC⊕RD

Enabling
mineral
sustainability

Software

Select the Standard to use and include it in the reports.

Regression analysis module included. Calculate the distance – charge model with the data from the previous records.

Include your company name and logo in the printed reports.

Free upgrades!

	Charge	Distance	Vertical	Longitude	Transverse
1	0.15	15.40	2.21	3.08	1.84
2	0.15	27.80	0.55	0.42	0.50
3	0.15	9.90	2.98	5.09	5.38
4	0.15	20.20	0.87	1.60	1.33
5	0.15	33.20	0.37	0.44	0.57
6	0.15	7.60	23.79	45.47	23.79
7	0.30	17.80	4.00	4.70	3.67
8	0.30	30.10	1.14	0.77	0.70
9	0.30	9.70	10.05	7.21	15.18
10	0.30	20.20	3.43	2.31	0.91
11	0.30	32.90	0.75	0.80	0.57
12	0.45	16.90	7.92	10.01	7.36
13	0.45	27.10	1.52	1.55	2.30
14	0.45	40.10	0.75	0.56	0.97
15	0.45	7.20	33.42	28.42	26.05
16	0.45	17.60	7.70	5.57	6.04
17	0.45	30.30	2.02	1.43	0.94
18	0.60	31.70	1.53	1.09	1.44
19	0.60	38.90	0.97	1.26	1.04
20	0.60	34.90	1.21	1.30	0.54
21	0.60	35.10	1.36	1.23	1.10

Regression line: V = 9387.61 · Q^0.887 · D^-2.398
Confidence line: V = 30589.92 · Q^0.887 · D^-2.398 (95 %)
Correlation coefficient: 0.97

Enabling mineral sustainability

Software

Print Report Example

VIBRACORD | Data summary | Vibraquipo
www.vibraquipo.com

Equipment:	Vibracord Tellus	**Record:**	3C79361CD0800.sis
Serial number:	TE0800	**Date & Time:**	2021-06-10 - 12:57:46
Date of calibration:	2020-12-23	**Pretrigger:**	60 ms (12:57:46.1226)
Note 1:	P1	**Longitude:**	-
Note 2:		**Latitude:**	-
Note 3:		**Time Source:**	NTP

Channel: 1 Geophone Vertical 2.53 mm/s
Channel: 2 Geophone Longitude 1.89 mm/s
Channel: 3 Geophone Transverse 1.89 mm/s
Channel: 4 Microphone 4.39 Pa

Vertical scale Velocity = 1.50 mm/s/div Pressure = 2.50 Pa/div

Record values

Channel	Maximum	Time	Frequency (*)
1	2.53 mm/s	357.9 ms	31 Hz
2	1.89 mm/s	307.1 ms	16 Hz
3	1.89 mm/s	307.1 ms	16 Hz
4	4.39 Pa/106.8 dB	1300.8 ms	2 Hz
Vector sum 1:		2.76 mm/s (357.0 ms)	

(*) Note: Frequency calculation method: FFT Energy spectrum (50%)
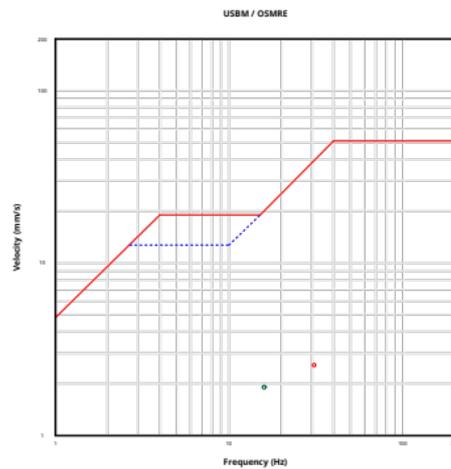
USBM / OSMRE

VIBRACORD

VIBRAQUIPO

C/ Gaiteiro de Soutelo, 3 Bajo
36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

vibraquipo@vibraquipo.com
www.vibraquipo.com
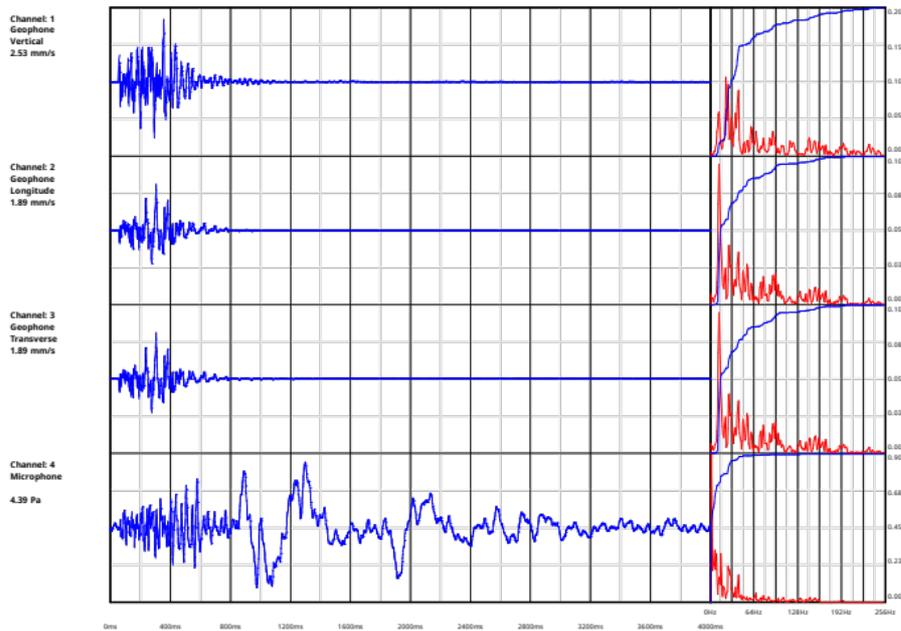
Enabling
mineral
sustainability

Vibration meters
Comparison chart

	VIBRACORD TELLUS	VIBRACORD GAIA	
Number of channels	Up to 14 (One / two 3-Axis block of geophones + 1 microphone).	3/4 (One 3-Axis block of geophones + 1 Microphone).	
Sample rate	2048 sps	1024 sps	
Frequency response	2 – 250 Hz (ISEE) 1-315 Hz & 1-80 Hz (DIN 45669-1)		
Trigger modes	Automatic Manual External	Automatic	-
FFT Calculation	Equipment and computer	Computer	-
Data transfer modes	USB Disk WEB Server FTP Server SFTP Server	SD Card	
Data visualization	Screen Printer WEB Server FTP Server E-Mail	Screen	-
Screen	7" TFT color 800x480 pixels	LCD Screen 4x20 characters	-
Keyboard	8 keys	8 keys	-
Data storage memory	Up to 30.000 records	1000 records	-
Internal power supply	Li-Ion rechargeable battery	Li-Ion rechargeable battery	-
Dimensions (mm)	270x230x100	165x105x55	
Weight (Without accessories)	3 kg	0,85 kg	
Environmental	IP-65 (Equipment) IP-68 (Geophones)	IP-65 (Equipment) IP-68 (Geophones)	

VIBRACORD

Enabling mineral sustainability

EPC GROUPE ✦ **VIBRAQUIPO** 🌐

C/ Gaiteiro de Soutelo, 3 Bajo
36004 Pontevedra (Spain)
Phone: (+34) 986 86 02 72

www.vibraquipo.com ↗

vibraquipo@vibraquipo.com

✦ **VIBRACORD**