

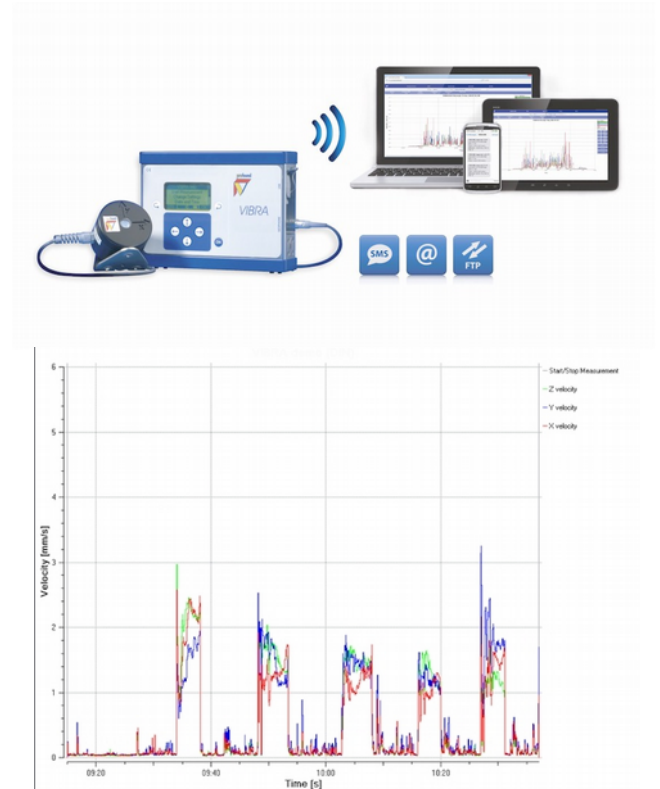
VIBRA+

Continuous and Online Vibration Monitoring

With a Profound VIBRA+, vibrations that are caused by traffic, pile driving, demolition work or blasting can be monitored continually and accurately. By recording the vibrations you can assess the risk of damage to buildings and sensitive equipment as well as the nuisance to people in an objective manner in accordance with the applicable guidelines.

During each time interval the VIBRA+ measures, directly displays and records both the maximum vibration levels and the vibration frequencies in x-, y- and z-direction. In addition every hour a full measuring signal of the highest peak value(s) is recorded. The VIBRA's digital signal processing guarantees measurements of a high quality and accuracy.

The top of the line, VIBRA+ has several special features, including integrated GPRS/internet options, PC Trace Recorder, displacement measurements and automatic level- and calibration checks. The various characteristics are summarized in the technical specifications.



Key Features

- Continuous and online vibration monitoring according to a large range of standards such as DIN 4150-2 and -3, BS 5228-2, BS 7385-2, SBR A and B, SS 460 48 61, blasting standards SS 460 48 66 and AS 2187.2 and is according to DIN 45669-1:2010.
- Direct display of measured peak values in X, Y, Z
- Wireless automatic data transfer via GPRS/3G
- Flexible use: direct SMS alarm, e-mail, FTP
- Real-time data upload to any FTP server
- High and low alarms
- Direct SMS alarm communication up to 5 selected recipients including start/stop functionality
- Compact, robust field-computer that is very easy to operate.
- Professional and fast (graphical) presentation of the monitoring results.

Applications

- Rail traffic
- Pile driving
- Demolition works
- Blasting
- Compaction
- Machine induced vibrations
- Road traffic
- Risk assessment of damage to buildings
- Nuisance to people within buildings

Profound Vibra+ Specifications

Maximum [v], maximum [a], frequency	In x, y, z-direction per time interval
Velocity range	0 – 100 mm/s
Resolution display	0.01 mm/s
Resolution AD-converter	0.001 mm/s (24 bits ADC)
Geophone correction	Digital IR filter
Frequency range and accuracy	1 Hz to 80 Hz (upper limit 315 Hz) DIN 45669-1:2010-09
Graphical display	≥ 4 lines, display back light, anti-reflex coating, anti scratch
Sensor type	3-Channel geophone (x-, y-, z-direction)
Storage capacity	4 MB
Storage interval	1, 2, 5, 10, 20, 30, 60s; 1, 2, 5, 10, 15 min
Data save level	Adjustable between 0.01 – 100.00 mm/s (or always)
Alarm level	Adjustable between 0.01 – 100.00 mm/s (or none)
Clock stability	≈ 5 min per year @ 25°C
Temperature range (operating)	-20°C to + 60°C
Protection rating	IP65 according to DIN 40050 / IEC 529
Batteries and Battery life	3 x 1.5 V Alkaline D-size batteries Up to 28 days (continuous operation)
Communication port	USB data transfer
KB _{FT} and KB _{Fmax}	In x-, y-, z-direction according to DIN 4150-2

Accessories



Geophone cable reel (50 m)



DIN geophone mounting plate



Wireless alarm beacon

