







VIBRA⁵

With the Profound VIBRA 5+ vibrations are innovatively and instantly measured. These vibrations may cause damage to buildings and sensitive equipment or cause nuisance to people. Profound has been influential in vibration measurement for many years, providing reliable and advanced measuring systems with a long service life. The VIBRA 5+ measures extremely accurately, is easy to fit and has an integrated memory and battery. The system can measure fully autonomous, transmits real-time data and alerts in case of exceeding thresholds. The system is easy to deploy and setup by means of an online portal. The VIBRA 5+ will unburdens you and therefore is unique in its kind.

Innovative design

The VIBRA 5+ has a rigid, resonance-free housing made of high quality glass and reinforced plastic. The built-in MEMS sensors combined with sophisticated signal processing and powerful data processing ensure that vibrations from low to high frequencies are accurately accessed. The system complies with the requirements of DIN 45669 and measures in accordance with: SBR-A:2017, SBR-B, DIN-4150 3/2 and other international standards.

Simple and efficient measurement

Performing a measurement is simple thanks to the ease of controlling the device: Attach the VIBRA 5+ to the desired object or mounting plate. The measurement directions are automatically defined by the system when starting a measurement. After installation, the VIBRA 5+ can be switched on. The system will connect to the portal immediately after start-up and retrieve the specific configuration for the linked measurement location. The simplicity of mounting, setting up and the integrated eSim makes installation very efficient: 'plug-and-play'.

During the measurement, all peak values (acceleration and speed with a weighted frequency) of the individual measurement directions are transmitted in x-, y- and z- directions to the portal. Alarms when a preset threshold is exceeded can be programmed via the portal. If the system is not connected to the portal, but still registers an exceedance, you can optionally enable the integrated alarm beacon to visually indicate an exceedance in the immediate vicinity of the device.

Continuously measure and visualise vibrations online **Profoundportal.online**

With the portal you can manage your vibration measurement projects and present the measurement data to your clients at a glance. The VIBRA 5+ uploads measurement data and status information to the portal. Depending on your desired subscription, you can get the most out of the systems and serve your clients professionally with regard to: installation, visualization, reporting and maintenance.

VIBRA5 Project monitoring

Best suited for professionals who want to provide projectbased information through automatic reports to end users or stakeholders. With this subscription it is also possible to download the full spectrum from peak values for further examination of measurement results. VIBRA5 Service add-on

Extra addition to the use of the system. The Service add-on provides you with Over-the-Air updates as new features become available. Remote diagnosis for possible maintenance and annual calibration are part of this addition.

The subscription for using your VIBRA 5+ can expanded with an additional component: the Service add-on. You will receive annual calibration and additionally you have the possibility to receive a diagnosis remotely, stopping you from having to return your devices unnecessary.

The Profound portal is a reliable and secure environment to visualize and manage all your measurement data. This environment where your data is housed meets strict demands including ISO 27001:2013 and an uptime of 99,9% (TIER3) is guaranteed.

A number of key points at a glance

- · Compact vibration meter with high water resistance
- · Easy installation in the field
- · Real-time data transfer and visualization
- · Advanced connectivity and telemetry
- System complies with DIN45669, DIN 4150:2/3 SBR A:2017, SBR B
- · Fully remote adjustable via server application (Profound Portal)
- · Use of eSim making the system plug-and-play.
- · Internal battery and internal memory in case of power or network interruptions.
- · Automatic project reports, where the sending frequency is adjustable.
- · Extensive options to efficiently manage and set up multiple systems

VIBRA⁵ UNIQUE IN ITS KIND

VIBRA5+ series technical specification

Technical Specification System	
Registration peak speed, peak acceleration and frequency	In x, y, z-direction per time interval (mm/s, m/s2, Hz)
Measurement directions	3 individual measurement directions: a_x , a_y , a_z
Orientation correction	Automatically based on gravity
Sensor types	MEMS acceleration sensor \pm 2g and \pm 4g
Traces	Transmission of up to 30 seconds per hour
Shipping interval	Per minute, alarm immediately when exceeding
Units of measurement	SI-system
Storage frequency peak values	Per 2 seconds
Resolution AD-converter	16 bit SAR
Sampling frequency	1024
Peak value	0,01
Frequency range and accuracy	0+ Hz until 500 Hz
Resolution dominant frequency determination	0,1 Hz
Casing	
Material	Glass reinforced polyamide
Degree of protection	IP65 according to DIN 40 050/IEC 529
Dimensions	154 x 130 x 21 mm (L x B x D in mm), excluding height feet
Weight	396 gram
Temperature range	-20 °C up to +60 °C
Assembling	1-point mounting by screw or mounting on base plate with Spikes (DIN 4150-2)

Hardware	
Memory capacity	8 Gb, ring memory (≈30 days)
Data transmission	built-in LTE Cat M1 / NB1 modem in combination with eSim
Clock stability	± 4 ppm (-10 °C to + 40 °C)
GPS	Position determination, time synchronization
Battery	Integrated Li-Ion battery
I/O functionality	
connector	3P souriau connector for fast charger or external battery
alarm lamp	Integrated High intensity LED
status display	1 multicoolor LED for status display(s)
Standards	
	DIN 45669-1
	DIN 4150 - 3
	DIN 4150 - 2
	SBR - A part 2017
	SBR - B : 2012
	SBR - C : 2012
	BS 5228 : 2009 (PPV + VDV)
	Ciculaire du France 1982
Accessories	
	External battery with hanging bracket
	Fast charger for external Power pack or VIBRA5 (included in delivery)
	Mounting plate (For SBR-A and B, compatible with VIBRA4 geophone)



FURTHER INFORMATION:

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