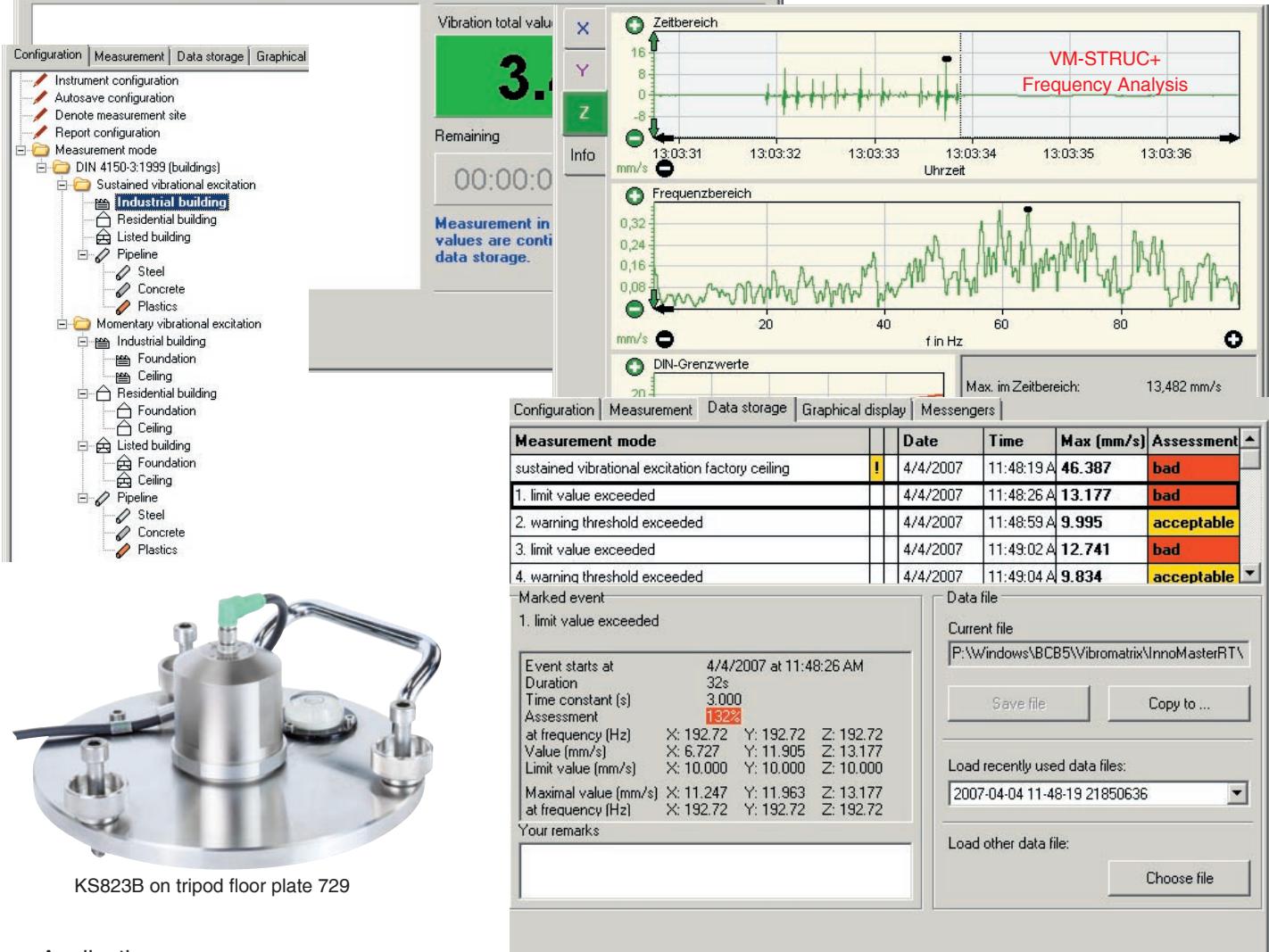


# PC Based Building Vibration Meter

## 7.1.5

### PC Data Acquisition

**VibroMetra**  
**VM-STRUC**  
**VM-PERS**



KS823B on tripod floor plate 729

#### Application

- Measurement of vibrations in buildings to DIN 4150-2 und -3
- Evaluation of the effects of vibrations on structures (VM-STRUC) and persons (VM-PERS)
- Documentation of vibration exposure

#### Properties

- PC based measuring system using the IEPE / USB interface M302 and IEPE compatible accelerometers
- Measurement of building vibration in three orthogonal axes and main vibration frequency
- Recording of vibration events and real-time signals
- Simple generation of individual reports
- High reliability by user guidance according to the standard
- Clone function, i.e. several instrument windows can be operated simultaneously with different settings
- Continuous or event triggered logging of the raw vibration signal for offline calculations
- Traceability of single vibration events possible
- Offline measurement with stored data
- Free update service from our website [www.MMF.de](http://www.MMF.de)

**Notice:** The software is bilingual English / German

VM-STRUC Kit  
VM-STRUC+PERS Kit



## Technical Data

Notice: For each channel a separate software license is required.

	VM-STRUC+	VM-STRUC	VM-PERS+	VM-PERS		
<b>Measurands</b>	Peak value of vibration velocity and instantaneous main frequency					
<b>Filters</b>	1 to 80 Hz; 1 to 315 Hz; Butterworth; - 40 dB / Dec.		1 to 80 Hz; Butterworth; - 40 dB / Dec.			
<b>Frequency analysis</b>	yes	no	yes	no		
<b>Duration of measurement</b>	10 s to infinite					
<b>Measuring method</b>	Continuous and momentary vibrations of industrial, residential and landmarked buildings, Vibrations of welded pipelines, concrete pipelines and brickwork pipelines		Momentary vibrations, road traffic, underground or surface rail traffic and civil works in industrial, commercial, residential and mixed areas			
<b>Measuring procedure</b>	<ul style="list-style-type: none"> <li>- Selection of the measuring method with user guidance</li> <li>- Display of the elapsed and remaining measuring time</li> <li>- Peak value of vibration velocity for all measuring directions</li> <li>- Main frequency for all measuring directions</li> <li>- Display of maximum peak value during measuring time</li> <li>- Display of total vibration value (maximum of the measuring directions)</li> </ul>					
<b>Memory</b>	<ul style="list-style-type: none"> <li>- Recording of up to 10,000 vibration events (crossing warning or alarm limits)</li> <li>- Each event is saved with the following data: <ul style="list-style-type: none"> <li>- Time of occurrence and used settings</li> <li>- Relative level of total vibration value in percent of the critical value</li> <li>- For each direction: measured maximum and most critical value (highest relative level)</li> <li>- For each direction: main frequency and resulting vibration limit</li> <li>- Real-time signal, resolution 625 samples/s for 1 to 80 Hz and 2500 samples/s for 1 to 315 Hz</li> </ul> </li> <li>- Each event can be annotated</li> <li>- Recording as text file or CSV (Excel)</li> <li>- CSV values can be imported into VM-STRUC</li> </ul>					
<b>Graphical display</b>	<ul style="list-style-type: none"> <li>- Zooming in and out of value and time axis</li> <li>- Selection of time intervals to be displayed</li> <li>- Enabling and disabling of warnings</li> <li>- Mouse-controlled measuring cursor</li> </ul>					
<b>Report function</b>	One DIN A4 page with user-defined contents and design, including selected time interval, number of events, highest and most critical values with main frequency, diagram of measuring values, user-defined text like headline, firm information, signature or logos					
<b>External messengers(opt.)</b>	Email (VM-MAIL), large color display (VM-LARGE) or FS20 radio switch system (VM-RADIO)					
<b>Required Components</b>	For triaxial measurement: 3 VM-STRUC / VM-PERS licenses, 2 IEPE/USB interfaces M302 1 triaxial IEPE accelerometer for building vibration <a href="#">KS823B</a> or 3 high sensitivity IEPE accelerometers, e.g. models <a href="#">KB12VD</a> or <a href="#">KS48C</a> , 3 sensor cables, <a href="#">triaxial mounting cube</a>					
<b>Contents VM-STRUC</b>	M302, sensor <a href="#">KS823B</a> , 10 m cable 088W+034, wall adapter 629, magnet 508 and tripod 729, software VM-STRUC (3 licenses)					
<b>Contents VM-PERS Kit</b>	M302, sensor <a href="#">KS823B</a> , 10 m cable 088W+034, wall adapter 629, magnet 508 and tripod 729, software VM-PERS(3 licenses)					

**Notice:** A free trial version of VibroMetra can be downloaded from our website [www.MMF.de](http://www.MMF.de).

**Metra Meß- und Frequenztechnik in Radebeul e.K.**

Specifications subject to change without prior notice.