OIDB vibrometer VIB

Addressing the issue of individual exposure to vibration

Light, robust and compact, **VIB** is a suitable instrument for the measurement of «hand-arm» and «whole-body» vibrations, according to the requirements of European Directive 2002/44/EC.

Whole-body and hand-arm

vibrometer: VIB

The vibrometer consists of a portable, ergonomic and miniaturised housing, hosting the acquisition unit, signal processing, data storage and data transfer.

- X, Y and Z vibration levels, daily exposure A(8)
- Signal and 1/1 or1/3 octave spectrum recording
- Presence detector and warning light
- 16-hour operating life

Processing software: dBMAESTRO

dBMAESTRO is used for transfer, process, report and archive data.

- Compliant with ISO5349
 & ISO2631standards
- Data transfer via USB2.0
- Worshop approach
- Automatic reports

Wireless remote control: dBA(8)

From a PC computer or PC tablet, the dBA(8) control software is the interf ace between the operator and vibrometer **VIB**. 2002/44/8

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Vib

• Simultaneous control up to 5 instruments

0,81

0,87

1,36

0,17

2,03

0,21

awx

awy

awz

awz2

- Management of measurement configurations
- Collection of measurement files
- Real-time display of measured data on a colour screen

m/s²

m/s²

m/s²

m/s²

Technical specifications

Standards	ISO 8041 (2005), ISO 5349 (2002), ISO 2631 (1997) CEM Radio ETSI EN 300 328 V1.5.1 (2004) / Emission CEI IEC 61000-6-3 / CEI IEC 61000-6-4 / Immunity CEI IEC 61000-6-1 / CEI IEC 61000-6-2		
Metrology			
Channels	From 1 to 4 (depending on configuration and option)		
Display resolution	0.01		
Conditioning	IEPE : 12V-4mA or 24V-4mA		
Voltage (input)	5V AC peak		
Overload	Yes (separate detection for each channel)		
Filtering	Wd, Wk, Wh (digital, according to ISO 8041)		
	Programmable filter: 0.4 - 4000 Hz 1/1 octave: 1Hz - 2kHz / 1/3 octave: 0.8Hz - 2.5kHz (optionnal on 1 channel)		
Measured magnitudes	Simple vibrometer: acceleration, peak, peak - peak, peak factor, rms (x, y, z) Hand-arm: acceleration, peak, peak - peak, rms (x, y, z), ahv, A(8) Whole-body: acceleration, peak, peak - peak, peak factor, rms (x, y, z), av, aeq, A(8), A(8)v, VDV, MTVV, SEAT Signal recording: manual or on trigger ($fe_{max} = 8192Hz$ (optional on 1 channel)) Parallel measurement and time history of all indicators		
Calibration	With a calibrator, by input of sensitivity or by gravity		
Temperature	-10°C / +50°C (0-95% HR)		
Dimension / Weight	105 x 60 x 25 mm / 135 g		
Memory module	Integrated 2 GB flash memory, type Micro SD Storage of measurement files (minimum rate: 1s) Signal storage (programmable sampling frequency)		
General performances	Typical battery life: 16 hours (stand-alone mode) / 10 hours (remote controlled mode)3.7 V - 2.3 A battery - Charging time: 6h30 (USB or charger)		
Depending on configuration	Triaxial Hand-Arm accelerometer 7133AM1	Triaxial Whole-Body seatpad WBA 001	Monoaxial accelerometer for SEAT DJB A 120VL
Sensitivity	10 mV/g	115 mV/g	10 mV/g
Dynamic range	500 g	18 g	500 g
Bandwidth	1 to 1 200 Hz (- 1dB)	0 to 400 Hz (- 3 dB)	0,1 to 1 000 Hz (-3 dB)
Resonance frequency	> 36 kHz	24 kHz	> 28 kHz
Weight	< 5 grams	243 grams	18 grams
Temperature range	-40°C / +125°C	-40°C / +105°C	-50°C / +125°C
Material / Characteristics	Titanium	Seatpad with presence detector	Stainless steel
Accessories	Adapters for handle, steering wheel and finger	Removable retractable reel cable	Floor mounting using an isolated magnetic base
Control software dBA(8)	Titanium Seatpad with presence detector Stainless steel Adapters for handle, steering wheel and finger Removable retractable reel cable Floor mounting using an isolated magnetic base Control using Tablet, Netbook, Laptop or Desktop PC: configuration management / realtime display / data collection Floor mounting using an isolated magnetic base Wireless Bluetooth communication Programmable start modes: immediate / delayed / by periods / on detection of presence Visual display and coding of data on colour screen of remote control Pre-programmed configurations (whole-body, hand-arm, free) Storage of signal: manual or automatic on trigger PC-compatible software Languages: English, French		
Processing software dBMAESTRO	Transfer of measurement files generated by VIB through USB2.0 Calculation of A(8) and peak factor according to Directive 2002/44/CE, calculation of dose on coded events Whole-body, Hand-arm Time history plots for all indicators Calculation of average values between cursors Automatic reports		
Standard package	VIB - Transducer - Desktop charger - dBA(8) dBMAESTRO - Carrying case / CD / Documentation		
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