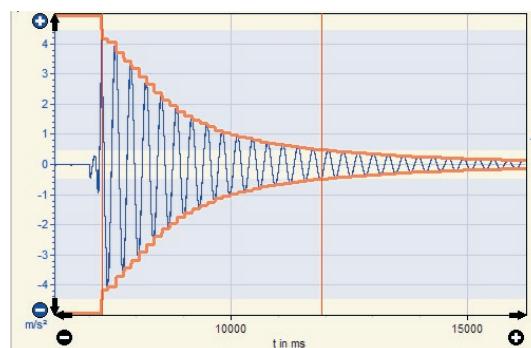
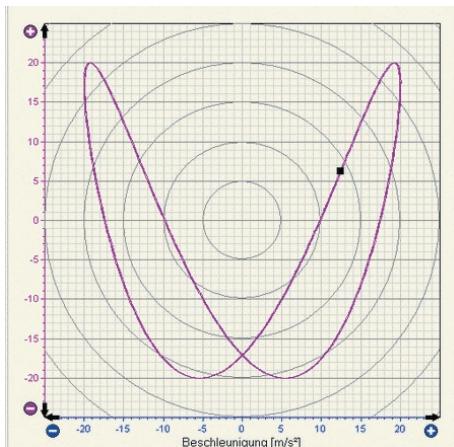


PC Based Oscilloscopes and Recorders

7.1.3

PC Data Acquisition

VibroMetra VM-PLOT VM-SCOPE



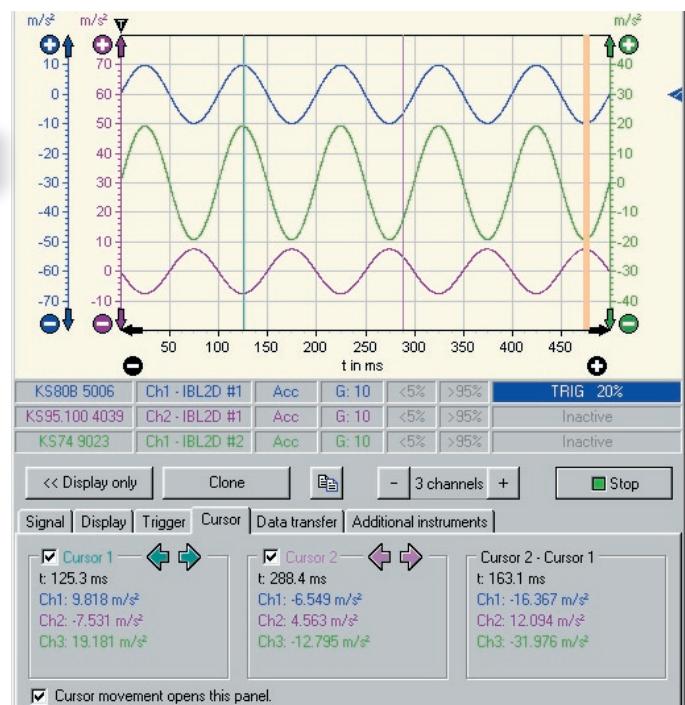
VM-SCOPE scilloscope



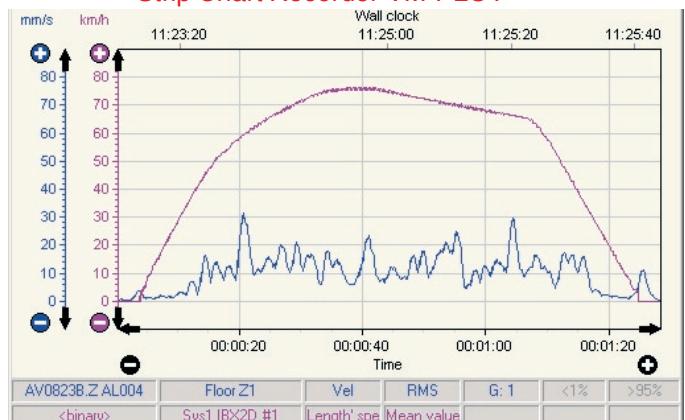
- PC based measuring system using the IEPE / USB interfaces M302/M312 and IEPE compatible accelerometers
- **VM-SCOPE** displays the signal shape of short vibration events, like shock, impact signals or drop tests
- **VM-PLOT** recordings RMS or peak values of slowly changing vibration signals
- **VM-PLOT**:
 - Long-term recording and display of vibration level up to 24 hours
 - Recorded data can be viewed later in full time resolution by means of zoom and scroll functions
 - RMS, positive/negative peak, peak-to-peak, instantaneous value as overall values and with VM-PLOT+ order values
 - Measurement of vibration acceleration and in VM-PLOT+ version also velocity and displacement and acoustic values
 - Synchronous display of up to four signals per window
 - Two time axes: clock time and elapsed time
 - High pass and low pass filters
 - Clone function allows synchronous recording in up to four windows, for instance with different filter or integrator settings
 - Export function as bitmap, EMF or text file
 - Offline analysis of stored measuring data
- **VM-SCOPE**:
 - Displays real-time vibration signals in the time domain
 - Large memory for long pre and post trigger time
 - Measurement of vibration acceleration and in VM-SCOPE+ version also velocity and displacement
 - VM-SCOPE+ measures Head Injury Criterion (HIC), decay time and phase position (orbit)
 - Synchronous display of up to four signals per window
 - Two measuring cursors
 - High pass and low pass filters
 - Clone function allows synchronous display in up to four windows, for instance with different trigger settings
 - Export function as bitmap, EMF or text file
 - Offline analysis of stored measuring data

- Free update service from our website www.MMF.de

Notice: All software instruments are bilingual English / German



Strip Chart Recorder VM-PLOT



Technical Data

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

	VM-SCOPE+	VM-SCOPE	VM-SCOPE SE*	VM-PLOT+	VM-PLOT	VM-PLOT SE*		
Function	Oszilloskop Oscilloscope			Y/t-Pegelschreiber Y/t Strip chart recorder				
AC voltage	x	x	x	x	x	x		
Vibration acceleration	x	x	x	x	x	x		
Vibration velocity	x	—	x	x	—	—		
Vibration displacement	x	—	—	x	—	—		
Overall values	x - Instantaneous value			Instantaneous value, peak value (absolute / positive / negative), peak-peak, true RMS				
				main frequency, harmonic distortion, crest factor				
Order values	-			Peak value, RMS, phase angle				
Akustikkennwerte Acoustic values	-			Sound level A and C weighted, unweighted, daily noise exposure				
Frequenzbereich Frequency range	0.3 - 2000 Hz (M302); 0.1 - 40 000 Hz (M312); free adjustable digital filter with 4 / 16 / 64 poles		0.1 - 40 000 Hz (only with M312)	0.3 - 2000 Hz (M302); 0.1 - 40 000 Hz (M312); free adjustable digital filter with 4 / 16 / 64 poles		0.1 - 40 000 Hz (only with M312)		
Recording rate	-			1 / 8 / 16 measurements per second				
Time window for RMS & peak	-			0,1 - 10 s, frei einstellbar 0,1 - 10 s, free adjustable				
Channels	1 - 4			1 - 4				
Trigger Modes	single, free running, repeating, pos. / neg. slope			-				
Trigger Source	Analog signal or digital input			-				
Time Stamps	-			Via digital input				
Measuring Cursors	2 Cursors with time and magnitude display			2 Cursors with time and magnitude display				
Pre/Post Trigger	0 .. 1000 ms / 0,001 .. 1000 s	0 .. 1000 ms / 0,001 .. 100 s						
Time axis	1 ms .. 101 s; 0.1 ms resolution	1 ms .. 11 s; 0.1 ms resolution		6 s .. 24 h				
Statistics functions	Min., max., mean			-				
Evaluation functions	Decay time, HIC, phase position (orbit)			-				
Refresh rate	1 to 16 times per second			1 to 4 times per second				
Data export	manually or after trigger as BMP, PNG, EMF or text			manually or periodically (>1 s) as BMP, PNG, EMF or				
Externe Melder External messengers	By Email (global VibroMetra option VM-MAIL)			Email or large color display (options VM-MAIL / VM-LARGE)				

* VM-SCOPE SE is a component of the combined license VM-SE FMS and VM-PLOT of VM-SE FMP

Notice: A free trial version of VibroMetra can be downloaded from our website www.MMF.de.

Metra Meß- und Frequenztechnik in Radebeul e.K.

Specifications subject to change without prior notice.