



## InnoMeter® Vibration Meters

InnoMeter

InnoMeter Pro  
Accelerometers

InnoMeter Pro - Photoelectric  
Reflex Switch

### Application

When vibrations have to be measured as significant parameters, InnoMeters are applied. Rotating parts in drives, gears, pumps, fans and many other technical products cause perturbing vibrations. Impulse-like loads, e.g. from a vibratory pile driver in the construction field, generate problems as well. In numerous vibration standards, for instance DIN 10816, significant vibration parameters are defined for a reliable evaluation of the vibration situation. These vibration parameters are precisely measured by InnoMeters and thus allow a safe assessment of the vibration state. InnoMeters are applied during the complete product cycle – development, manufacturing, final inspection, service. Weak spots are discovered, the success of counter measures is proven and the compliance with limits is controlled.

### Properties

The InnoMeters are highly universal measuring instruments for vibration parameters. They can be adapted to parameters from numerous vibration standards. This can be achieved by means of following settings:

- Measurands: acceleration, velocity, displacement
- Free filter adjustment 0.1 ... 40000 Hz
- Up to 32 units, metric and imperial
- Up to 8 vibration parameters

The operation, also of several instruments at the same time, is supported by the following indicators:

- Connected sensor
- Measuring point
- Overload and underload

The clone function makes it possible to operate several InnoMeters at the same time, for example to measure several parameters simultaneously. The InnoMeter Pro is able not only to process signals from vibration sensors, but also from rpm sensors. Additionally, a conversion to other units is possible, for instance in order to measure length' speeds.

## Specification

Model	InnoMeter Pro	InnoMeter
<b>Signal processing</b>		
Signal source	Vibration sensors RPM sensors	Vibration sensors
Filter	Freely adjustable 0.1 ... 40000 Hz **	
Time	Freely adjustable 0.1 ... 10 s	
Measurands	AC voltage Vibration acceleration Vibration velocity Vibration displacement Rotation speed	AC voltage Vibration acceleration Vibration velocity Vibration displacement
Units	V, mV, $\mu$ V, nV, pV m/s <sup>2</sup> , mm/s <sup>2</sup> , $\mu$ m/s <sup>2</sup> , nm/s <sup>2</sup> , pm/s <sup>2</sup> , g, mg, dB m/s, mm/s, $\mu$ m/s, nm/s, pm/s, in/s, dB m, mm, $\mu$ m, nm, pm, in, dB 1/min, 1/s, Hz (rotation speed) Hz, kHz (main frequency) % (harmonic distortion)	V, mV, $\mu$ V, nV, pV m/s <sup>2</sup> , mm/s <sup>2</sup> , $\mu$ m/s <sup>2</sup> , nm/s <sup>2</sup> , pm/s <sup>2</sup> , g, mg, dB m/s, mm/s, $\mu$ m/s, nm/s, pm/s, in/s, dB m, mm, $\mu$ m, nm, pm, in, dB
Parameters	Instantaneous value Peak value absolute Peak value positive Peak value negative Peak-to-peak value True RMS Harmonic distortion Main frequency	Instantaneous value Peak value absolute Peak value positive Peak value negative Peak-to-peak value True RMS
<b>Graphical presentation</b>		
Display	5 digits 0.001 ... 99999	
Refresh	1... 4 times per second *	
Indicators	Sensor, measuring channel, measurand, parameter, gain, overload, underload	
recommended screen resolution	From 800 x 600 pixels on	
<b>Miscellaneous</b>		
Available in a kit	VMSet-03 ... 07	--
General functions	Hold of measuring value after switch-off; Instrument is cloneable	

\* Centrally managed in the InnoMaster

\*\* Usage with InnoBeamer L2: 0.3 ... 2000 Hz

Our policy is to improve specification of our products continuously, so technical and production details can be changed without any notice.