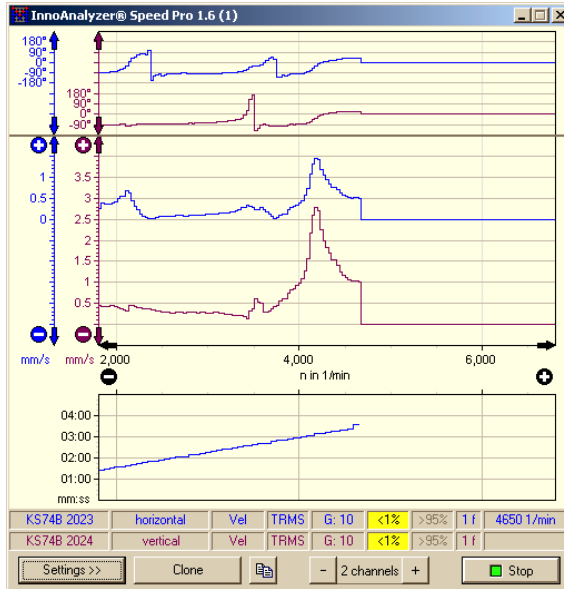


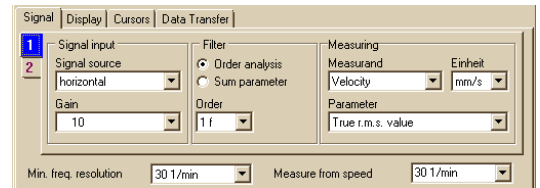


InnoAnalyzer® Speed

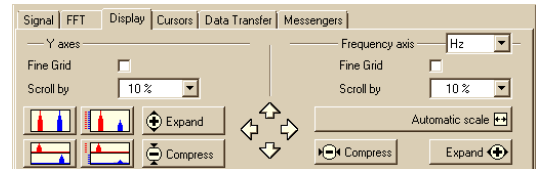
Rotation-Speed Coupled Vibration Analyzers



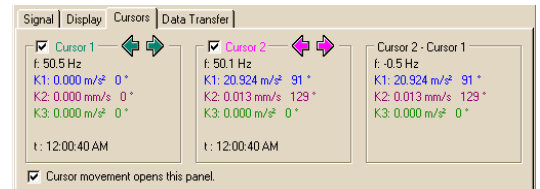
Collapsed settings



Signal settings



Display settings



Cursor settings

Application

Rotating parts in drives, gears, pumps, fans and many other technical products cause perturbing vibrations. Different rotation speeds cause different vibrations since the measurement objects develop or do not develop resonant behaviour at certain rotation speeds.

These differences become obviously when measuring run-up or coast-down curves. A rotor changes its rotation speed and excites different frequencies of the system.

The InnoAnalyzers Speed measure the vibration level and phase angle at the rotation speed or a multiple and graphically indicate magnitude and phase at the respective rotation speed. This way, for instance resonant rotation speed levels are detected. The evolution of the rotation speed is displayed graphically as well.

For rotation speed detection, VibroMatrix applies a high quality photoelectric reflex switch. By means of background suppression, it only reacts to its reflector. Optionally, an existing rotation speed signal can be fed as pulse/revolution

Properties

The InnoAnalyzers Speed in Standard and in Pro Version not only master rotation-speed-selective filtering but also band-pass filtering of the vibration signal and its display as sum parameter above the rotation speed. In addition to vibration acceleration, the Pro version is also able to analyze vibration velocity and vibration displacement.

Two cursors are available for the evaluation. They can be moved freely or positioned precisely by button. Frequency and magnitude values at the cursor position are presented numerically.

The clone function makes it possible to operate several InnoAnalyzers at the same time. For example vibrations can be analyzed at the rotation speed and at a multiple of the rotation speed at the same time.

The export of data into other applications as bitmap/PNG file for documentation or as text for further examination provides additional fields of application.

Specification

Model	InnoAnalyzer Speed Pro	InnoAnalyzer Speed
Signal processing		
Measurands Y-axis	AC voltage Vibration acceleration Vibration velocity Vibration displacement	AC voltage Vibration acceleration
Units Y-axis	V, mV, μ V, nV, pV m/s^2 , mm/s^2 , $\mu m/s^2$, nm/s^2 , pm/s^2 , g, mg, μ g, dB m/s , mm/s , $\mu m/s$, nm/s , pm/s , in/s, dB m, mm, μ m, nm, pm, in, dB	V, mV, μ V, nV, pV m/s^2 , mm/s^2 , $\mu m/s^2$, nm/s^2 , pm/s^2 , g, mg, μ g, dB
Parameters Y-axis	Peak value, true rms	
Rotation speed multiples	0.5 as well as from 1 ... 12	
Measurands X-axis	Frequency / rotation speed	
Units X-axis	Hz / min^{-1}	
Frequency range	Freely adjustable 0 ... 40000 Hz **	
Frequency resolution	From 0.1 Hz = 6 min^{-1}	
Graphical presentation		
Number of graphs	1 ... 4 per window	
Refresh	1 ... 16 times per second *	
Interval Y-axis	0.01 ... 10000	
Interval phase axis	0 ... 360° / -180 ... +180° / -3600 ... 3600° (switchable)	
Interval time axis	1 min ... 14 days	
Interval X-axis (frequency)	0 ... 40000 Hz **	
Interval X-axis (rotation speed)	0 ... 2400000 min^{-1} **	
Indicators	Sensor, measuring channel, measurand, parameter, gain, underload, overload	
Recommended screen resolution	From 1024 x 768 pixels on	
Cursors		
Presentation	2 lines, optionally freely adjustable by mouse or button	
Numeric cursor data	For each cursor as well as for difference cursor 2 - cursor 1	
Numeric cursor refresh	1 ... 4 times per second *	
Data export		
Control	Manually or automatic periodically triggered	
Formats	Bitmap , PNG, Enhanced Meta File (EMF), Text	
Destinations	In clipboard or file	
Miscellaneous		
Available in a kit	VMSets-03 ... 07	--
General functions	Hold function, cloneable	

* Centrally managed in the InnoMaster

** Usage with InnoBeamer L2: maximum frequency 2000 Hz, maximum rotation speed 120000 min^{-1}

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