

VibroDiag technical specification

Instrument type	dual-channel , portable
Power supply	power supply adaptor 15V DC / 1.6A built-in Li-Pol accumulator (operating time approx. 3 hours, charge time approx. 2 hours)
Sensor inputs	2x accelerometer sensor connector, 1x speed / reference sensor connector
Measured parameters	overall velocity, FFT (acceleration and velocity), speed
Standard modules	overall velocity, speed, routes, FFT, run up / coast down, single plane balancing, recorder, VibroGuide
Ranges (metric)	max. velocity 200 mm·s ⁻¹ , max. acceleration 200 m·s ⁻²
Frequency ranges	1/3/10 ... 1.000 Hz
Accuracy:	
• Overall	at 80 Hz: ±2% ± 1digit within the filter range 10... 1.000 Hz: ±10% ± 1digit at cut-off frequencies: +10% -20% ± 1digit
• Frequency response	40 dB/dec transition steepness 1/3/10Hz filter 40 dB/dec transition steepness 1kHz filter
• Speed	10 ... 15000 RPM, ±1% ± 5digits
• FFT parameters	up to 15kHz sampling frequency, 8192 samples
• FFT analysis of overall	Indication of amplitude within the selected filter range: +5% ... -20%
• FFT window types	Rectangular / Hann
• FFT averages	1/4/8/16
• Overall FFT noise	+5% + 5 digits
Accelerometer input characteristics	
• Input impedance	100kOhm
• Input bandwidth	6.5kHz
• Sensor supply	5mA constant current, On/Off function
Speed / reference input DC characteristics	
• Input logic low	$V_{ILmin} = 0,0V$ $V_{ILmax} = 1,6V$
• Input logic high	$V_{IHmin} = 2,5V$ $V_{IHmax} = 24,0V$
• Maximal surge current	$I_{smax} = 3mA$

Operational temperature	0 to + 40 °C
Protection	IP20
Dimensions	approx. 147 x 85 x 33 (W x H x D)
Mass	aprox. 350g
Connectivity	USB, SD card
Software	Viditech Control Center 2
Included accessories	2x accelerometric sensors with cables, magnetic sensor holders, power supply adaptor, preinstalled SD Card, USB cable, CD with ControlCenter software.
Optional accessories	Speed / reference sensor