



The Allrounders: VIBROPORT 80 & VIBROTEST 80



FFT-ANALYZER MODULE

The *FFT-Analyzer module* is the perfect tool for finding the source/cause of the vibration. The FFT and envelope analysis techniques resolve the total vibration into its individual frequency components. Each spectral line has its specific frequency and amplitude. The amplitude typically represents the “fault severity” while the frequency represents the “fault location”. This makes it easier to reliably diagnose machine faults such as unbalance, gearbox damage, misalignment and rolling-element bearing damage.



FFT-Analyzer Module

HIGHLIGHTS

- **High-end FFT-frequency range and resolution** – Is realized in the instrument by frequency analysis in the range from DC (DC component removed from spectrum) up to 80 kHz with up to 25,600 lines resolution.
- **Envelope Spectra** – Are offered by two spectral analysis techniques: BCS (Bearing Condition Signature) analysis and the SED (Selective Envelope Detection). Both techniques are based on the fault amplitude modulation of a carrier frequency.
- **Simultaneous display of time & frequency domain** – Time signal and spectrum can be displayed simultaneously.
- **Cross-channel phase** – Used to diagnose, for example, misalignment. The phase difference between two channels is acquired without using a speed reference.
- **Cursors and zooming** – The handheld supports single, peak find and harmonic cursors. A user-friendly zooming feature for evaluation purposes is provided in X- and Y-axis direction.



Screenshot of 2-channel FFT

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