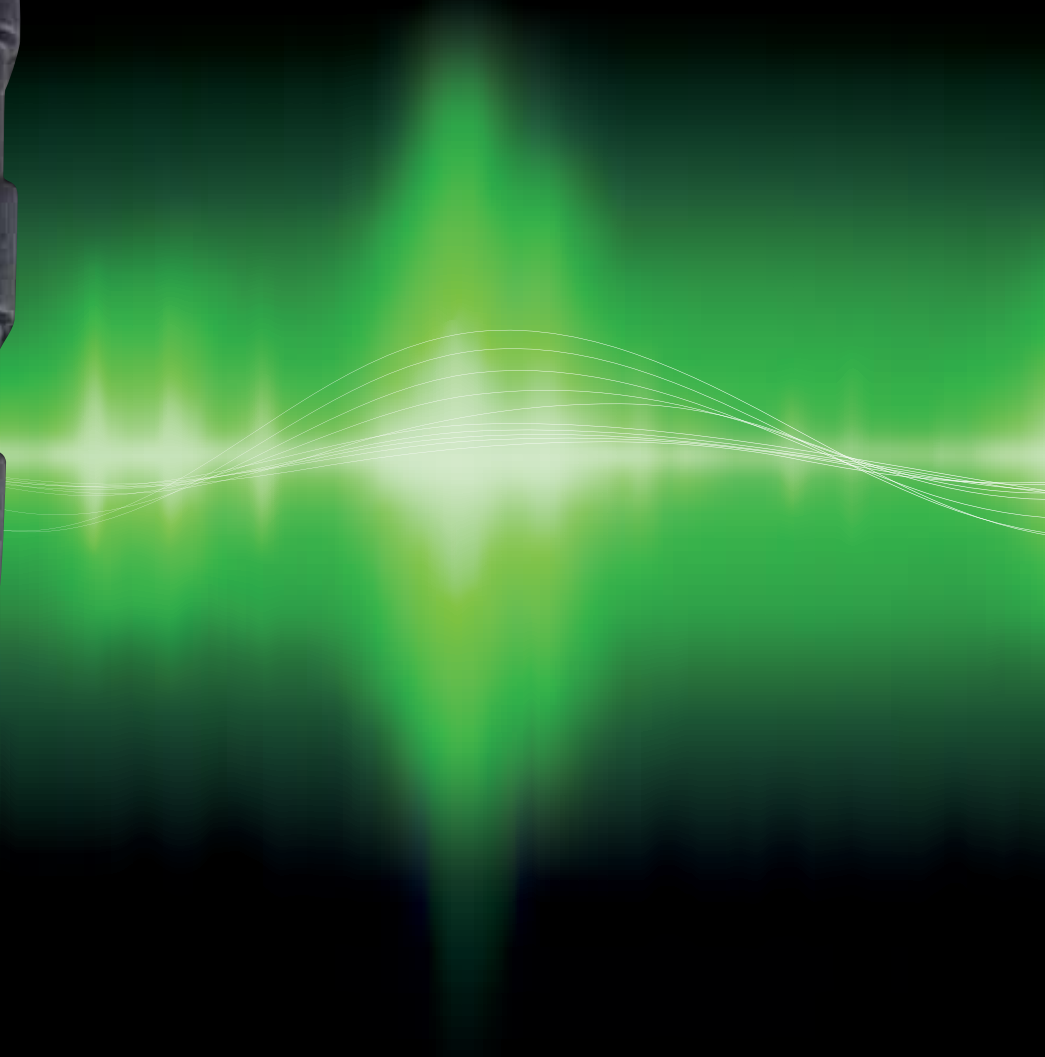


**SPM**



**Leonova®**  
EMERALD



**PORTABLE EFFICIENCY**

# CONDITION MONITORING TECHNIQUES FOR EVERY NEED

## BEARING MONITORING WITH SPM HD®

SPM HD is a new achievement in condition monitoring technology and a groundbreaking solution to problems involving condition measurement on low speed machinery.

The method is a patented evolvement of the well-known and reliable True SPM® method, commonly recognized as the best method for measuring bearing condition on rotating machinery. Requiring little input data, the method measures signals from rolling element bearings and instantly evaluates the condition in intuitive green - yellow - red condition codes.

Where established methods fail, SPM HD detects deteriorating bearing condition and incipient failures with impressive accuracy and exceptional prewarning times. The perfect companion to vibration analysis, SPM HD can be used successfully on all types of machinery with rolling element bearings.



Ex version available

3.5" TFT colour display  
with automatic back light

Programmable function keys

One hand operation, right or left

Accepts IEPE standard  
vibration transducers

Carbon-fiber-reinforced enclosure, IP65

Exchangeable Li-Ion battery pack for  
min. 18 hours normal use

RF transponder for contact free measuring  
point identification, read and write functions  
in connection with CondID® memory tags

Drop test 1 meter according to IEC 60079-0

Weight 860 g



## HIGH-PERFORMANCE VIBRATION ANALYSIS

Leonova Emerald® provides razor-sharp spectrums even where signals are weak and low in energy content. The excellent signal-to-noise ratio is a decisive advantage where weak signals are present among stronger signals, such as in gearboxes.

The instrument offers advanced and innovative order tracking functionality. For shock pulse and vibration analysis on variable speed machinery, the sophisticated HD Order Tracking algorithms very carefully trace RPM variations occurring during data acquisition. Measurements are thus more precise and spectrums more detailed than ever before.

The EVAM® measuring technique supplies preprogrammed evaluation models for time and frequency domain parameters. Measurement data processing, machine fault symptom computation and trending is all done in the instrument.

Frequency range DC to 20 kHz

Dynamic range up to 120 dB, 24 bit AD

Up to 12800 line FFT spectrum

Pre-fault symptoms for spectrum analysis

Waterfall, phase and real time spectrum

Simultaneous recording for up to 50 hours

Enveloping, true zoom, synchronous measurement

Stroboscope input/output for rpm measurement

Download thousands of measuring points

Motor current analysis

Speed measurements 1 – 120 000 rpm

Stethoscope function, earphones

Automatic transducer line test

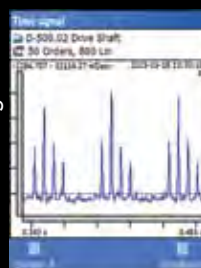
Voice recording of comments

Language selection

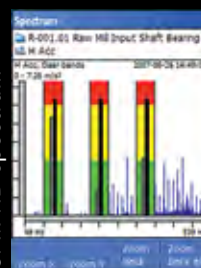
Measuring route



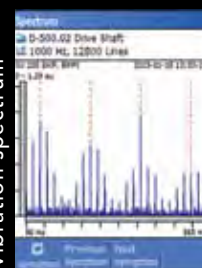
SPM HD time signal



SPM HD spectrum



Vibration spectrum



Dynamic balancing

