



# Leonova®

DIAMOND

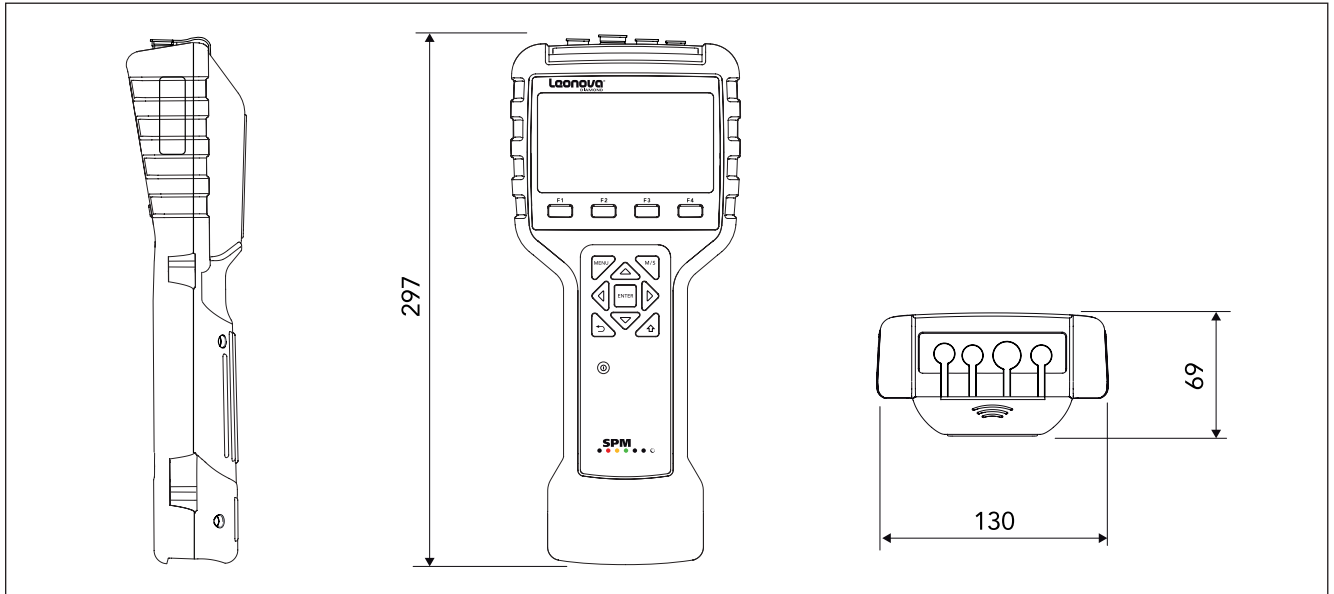
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# Leonova Diamond® – Instrument specifications



## Technical specifications

Housing:	ABS/PC/TPE, IP65
Dimensions:	297 x 130 x 69 mm
Weight:	890 g
Keypad:	Sealed, snap action
Display:	TFT colour, 480 x 272 pixels, 4.3 inch widescreen, adjustable backlight
Main processor:	400 MHz ARM
Memory:	256 MB RAM, 512 MB Flash, SD card 1GB expandable up to 8GB
Operating system:	Microsoft Windows® CE
DSP processor:	375 MHz floating point
Communication:	USB 2.0
Power supply:	Rechargeable Lithium-Ion battery pack, 5200 mAh or power adapter
Battery power:	For min. 16 hours normal use (20°C)
Operating temperature:	-20 to 55 °C , non condensing
Charging temperature:	0 to 45 °C
General features:	Language selection, battery status indication, transducer line test, metric or imperial units
Meas. point identification:	NFC transponder for communication with CondiD™ tags, read/write distance max. 50 mm (2 inch)

## Vibration monitoring

Vibration channels:	3 simultaneous
Dynamic range:	up to 120 dB, 24 bit A/D converter
Frequency range:	0 (DC) to 40 kHz
Resolution:	Max. 25 600 lines
Vibration transducer input:	< 24 Vpp. Transducer supply of 2,5 mA for IEPE (ICP) type can be set On/Off

Transducer types: Any transducers (disp., vel. or acc.) with voltage output

Measuring techniques: ISO 2372, ISO 10816, HD ENV, EVAM Evaluated Vibration Analysis, FFT Spectrum with Symptoms, Orbit analysis, 3 channels simultaneously, balancing

## Bearing monitoring

Measuring range:	SPM HD: -30 to 110 dBsv (44000 transducer) dBm/dBc: -9 to 99 dBsv LR/HR: -19 to 99 dBsv
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Resolution: 0,2 dB/HD, 1 dB dBm/dBc and LR/HR

Transducer types: SPM 40000, 42000, 44000, probe and quick connector transducers, DuoTech

## Tacho input

Measuring range:	1 to 150 000 PPM
Resolution:	1 pulse
Accuracy:	± (1 pulse + 0.01% of reading)
Transducer types:	TTP10, TTL pulses, keyphasor and proximity switch NPN/PNP.
Output:	TTL output for stroboscope and 12 VDC

## Analog signals

Measurement range:	0 to 10 V DC, 0 to 20 mA
Resolution:	18 bit A/D converter
Accuracy:	± 1% of reading + 0,1 V/mA

## Output/input

Headphones/microphone:	3.5 mm stereo plug
Communication:	Mini USB

## Temperature measurement

Inputs: TTP10 or via analog input

## Stethoscope

Transducer types:	Shock pulse and vibration transducer
Settings:	Filter, volume and gain

Patents: DE#60304328.3 - US#7,054,761 - US#7,167,814 - US#7,200,519 - US#7,301,616 - US#7,313,484  
US#7,324,919 - US#7,711,519 - US#7,774,166 - DE#60336383.0 - US#7,949,496 - DE#60337804.8  
GB#1474662 - GB#1474663 - DE#60338365.3 - ZA#2011/04946 - SE#0951017-3 - DE#60341502.4  
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