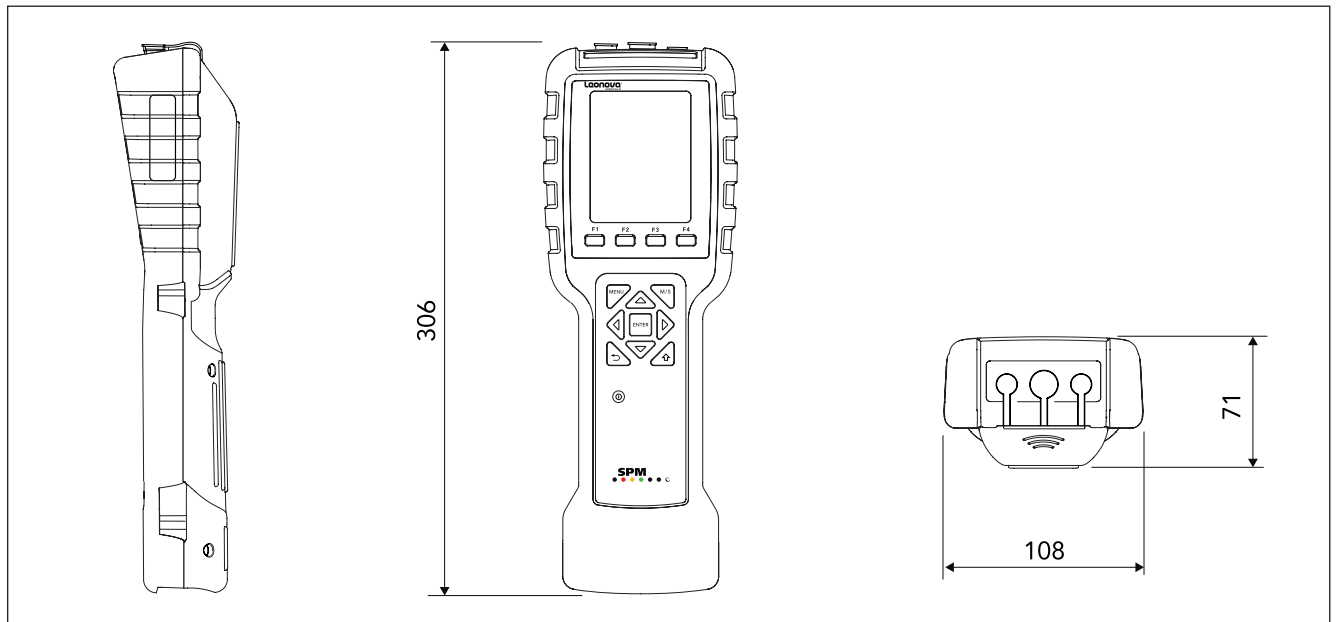


# Leonova Emerald® – Instrument specifications



## Technical specifications

Housing:	ABS/PC/TPE, IP65
Dimensions:	306 x 108 x 71 mm
Weight:	860 g
Keypad:	Sealed, snap action
Display:	TFT colour, 240 x 320 pixels, 3.5 inch, adjustable backlight
Main processor:	400 MHz ARM
Memory:	256 MB RAM, 512 MB Flash, SD card 1 GB
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. 18 hours normal use (20°C)
Operating temperature:	-20 to 55 °C (-4 to 122 °F), non condensing
Charging temperature:	0 to 45 °C (32 to 113 °F)
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)

## Output/input

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

## Temperature measurement

Input:	TTP10 Tachometer/Temp. probe
--------	------------------------------

## Stethoscope

Transducer types:	Shock pulse and vibration transducers
-------------------	---------------------------------------

Settings:	Filter, volume and gain
-----------	-------------------------

## Vibration monitoring

Vibration channels:	1
Dynamic range:	< 120 dB, 24 bit A/D converter
Frequency range:	0 (DC) to 20 kHz
Resolution:	Max. 12 800 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, FFT with symptoms, EVAM Evaluated Vibration Analysis, 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
Resolution:	0,2 dB / HD, 1 dB / dBm/dBc and LR/HR
Transducer types:	SPM 40000, 42000, 44000, probe and quick connector transducers, DuoTech

## Tachometer input

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

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  
GB#1474659 - SE#1000631-0 - US#8,762,104 - US#8,812,265 - US#8,810,396 - CN#ZL200980155994.1  
CN#ZL201080019737.8 - KZ#020791 - RU#020791 - AU#2009330744 - RU#021908 - KZ#021908  
US#9,200,980 - US#9,213,671 - CN#ZL201180006321.7 - KZ#022630 - RU#022630 - US#9,279,715  
US#9,304,033 - KZ#024339 - RU#024339 - CN#ZL201380007381.X - AU#2015203801 - AU#2013215672  
RU#201491377 - CN#ZL2012800347548 - US#6,873,931 - DE#602013021988.5 - DK/FI/FR/IT/NL/NO/ES/  
GB#2810027 - SE#13744257.0 - AU# 2015203361 - RU# 027452 - GB# 2505984 - US# 9,772,219

