PORTABLE CONDITION MONITORING SYSTEMS





synergys-technologies.com















VSHOOTER+®

AUTO VIBRATION ANALYZER

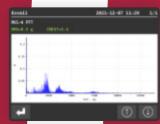
PREDICTIVE MAINTENANCE HAS NEVER BEEN EASIER!

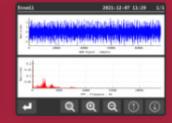
- Machine Condition Picture (MCP) at a glance
- High quality wired 100 mV/g ICP&IEPE sensor with strong magnet
- Overall RMS values FFT spectrum Time signal Trend curve ${\sf T}^{\circ}$
- Li-lon battery with 6 hours autonomy
- Embedded IR thermal camera (160x120 FLIR Lepton)
- Embedded 5 MP digital visible camera
- AUTO ANALYSIS capabilities: Unbalance Misalignment -Looseness - ??? - Bearing lubrication - Bearing shock
- BALISHOOTER® firmware for severity checking of only Unbalance or Misalignment defaults
- Reporting capabilities with PC via USB
- Stereo headphone output













Unique BALISHOOTER® program for Unbalance & Misalignment default severity detection:



Unbalance is critical in fan installations (direct coupled or with belt pulley transmission)

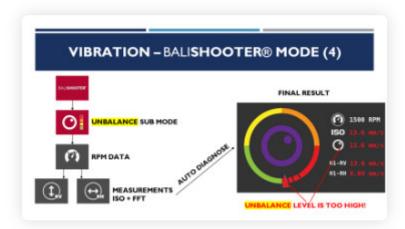


Misalignment is critical in direct coupled machines (with coupling)

Neglecting **Unbalance & Misalignment** can be catastrophic: **BREAKAGE-MTBF DECREASE-BEARING FAILURE - PRODUCTION LOSS - SEAL WEAR...**

Unbalance & Misalignment (direct coupling) represent about **70% of vibration problems** on a rotating machine like an electrical motor, a pump, a fan (blower)...

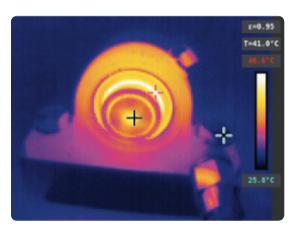
Unbalance & Misalignment (direct coupling) defaults can easily be repaired (Balancing and Alignment job).



VSHOOTER*® will automatically analyze UNBALANCE or MISALIGNMENT defaults levels and will let you know what's happened on your machine at a glance.



VSHOOTER+® also includes an infrared thermal camera (160x120 pixels FLIR LEPTON) program with Emissivity setting, Central cursor, Max Auto cursor, Min Auto cursor. Thermal pictures can be taken and downloaded to PC via USB.



VSHOOTER+® TECHNICAL SPECIFICATIONS

Weight	3,2kg with case - 0,7kg for device only
Size	310x165x65mm for device only
	IP54 for device only (ABS plastic) - 6H Li-lon rechargeable battery
Camera	Digital 5MP
IR camera	FLIR LEPTON 160x120 px
Display	5,7" 640x480 px touchscreen
Sensor	ICP/IEPE accelerometer - 100 mV/g with strong magnet
Output	Stereo headphone for "mechanical" listening
Measurements	10(2)-1000 Hz ISO RMS in mm/s
	1000-14000 Hz RMS in g & CREST
	T° from -10°C > +400°C
	2-400 Hz in mm/s & 2-14000 Hz in g FFT & TIME
	TRENDING mm/s & g
Memory	Micro USB output for PC reporting and memory saving
Power charger	Universal 12VDC-1,5A



WIRELESS VIBRATION ANALYZER

TRIAXIAL PREDICTIVE MAINTENANCE

- Rugged smartphone (IP68 MIL STD 810G)
- Li-PO battery with high continuous 12H capacity
- Overall RMS, FFT, TREND (mm/s & g)
- · Large memory (64 GB)
- · Data transfer to PC via USB-C
- Multimeter & MCP mode (Machine Condition Picture)
- · Auto analysis of defaults:
- Unbalance Misalignment Looseness Bearing Lubrication & Shock

3 versions available:

- 1. VSHOOTER®-3-WL, standard version
- 2. VSHOOTER®-3-WL-IR, with thermal camera (80x60 pixels 9 Hz)
- 3. VSHOOTER®-3-WL-IRHD, with thermal camera (256x192 px 25 Hz)



MACHINE2

В

14 mm/s

RH 1.97 mm/s

AX 2.21 mm/s RV 5.20 g (2.58)

10-1000Hz

(V) RV

ald RV ald RH ald AX

kview

NEW!

A UNIQUE VIBRATION ANALYSIS EXPERIENCE WITH THE VSHOOTER®-3-WL AND ITS WIRELESS TRIAXIAL SENSOR!



Bluetooth connectivity

For more security!



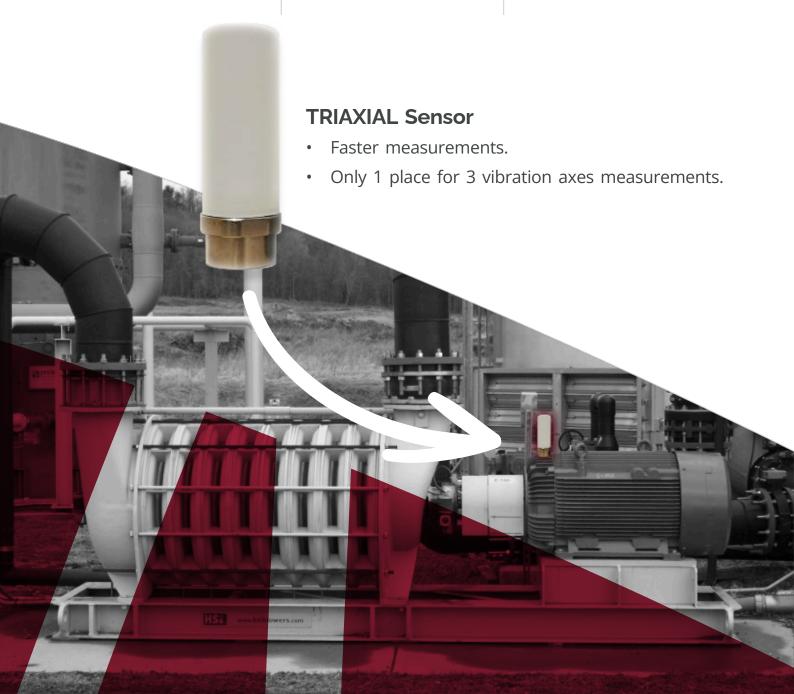
Large autonomy

About 2 years!



Rugged & Waterproof

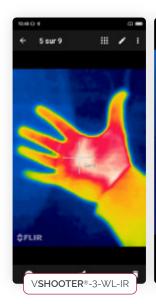
For more efficiency!

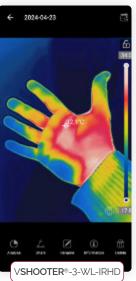




VSHOOTER®-3-WL-IR has an embedded thermal camera (80x60 pixels, 9 Hz, FLIR LEPTON) where you can view the hottest and the coldest temperatures of the scene (Automatic) but also a fixed central cursor. Thermal pictures can be saved and reported to PC. Adjustable emissivity.

A version IRHD is also available with a better resolution and refreshment (256 x 192 px - 25 Hz).





VSHOOTER-3-WL TECHNICAL SPECIFICATIONS

Weig	ht 1,5 kg with case - 0,3 kg without case
Si	ze 159x80x18mm smartphone only – 235x180x106mm case only
	IP68 for smartphone (MIL STD 810G) - Rechargeable Li-Po battery
Came	ra Digital 16+8 MP
Thermal Came	IR version: FLIR LEPTON 80x60 px & MSX function IRHD version: INFIRAY 256x192 px & PIP - DUAL - FUSION functions
Scree	5,7" 1440x720 px touchscreen
Sens	or IP67 Triaxial MEMS Bluetooth® (Li-SOCl2 battery) with magnet
Measuremen	ts 10(2) - 1000 Hz ISO10816 RMS in mm/s
	1000 – 8000 Hz RMS in g & CREST
	2-400 Hz in mm/s & 2-8000 Hz in g FFT spectrum & TIME & TREND
Memo	ry USB-C output for PC reports and data saving
Pow	er Universal USB-C charger





SYNERGYS TECHNOLOGIES has been established in 1996 in France, to offer innovative and professional solutions for preventive and predictive maintenance.

SYNERGYS TECHNOLOGIES is the inventor of the ultrasonic visualization concept with the LEAKSHOOTER®, of the MCP (Machine Condition Picture) concept with the VSHOOTER® and of the thermal contour concept with the TSHOOTER®.

We are present worldwide with professional and trained distributors.



VSHOOTER® une innovation de SYNERGYS TECHNOLOGIES

Quartier Plessier - 39, avenue du 8º Régiment de Hussards BP 30109 - 68132 ALTKIRCH CEDEX - FRANCE Tél. +33 (0)3 89 08 32 72 / Fax +33 (0)3 89 08 32 73 info@synergys-technologies.com www.synergys-technologies.com Distribué par :