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Acoem Wireless Balancer

Wireless Innovation Continues

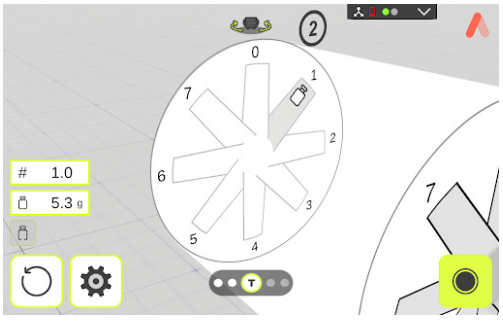
Acoem Wireless Balancer is the industry's first wireless, two-plane synchronous balancing solution for industrial machinery.

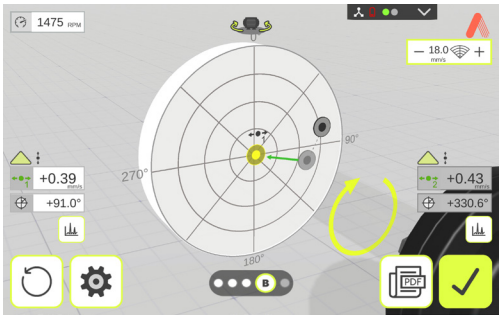
Designed to enhance safety when working near rotating parts, it provides a graphical, step-by-step guided procedure to ensure precise and reliable balancing.

- Enhanced Safety
- Empowered users
- Time Saving
- All in one reliability platform

The Wireless Balancer's innovative **Acoem WBS™ (Wireless Balancing Synchronism) methodology** utilizes two **wireless accelerometers,** synchronized in real-time with a laser tachometer. Combined with smart assistance functions, it minimizes the number of balancing runs required, ensuring optimal safety and long-term operational reliability.

Wireless precision balancing capabilities	
Type	
Application	1 or 2 plane wireless WBS™ balancing of rigid rotors
Number of channels	4-channel balancing (dual direction per sensor) + Tachometer
Angular precision	0.5° at 3000 RPM
Speed range	Recommended for applications up to 6000 RPM
Report	PDF, Customizable
Balancing assistance	Step by step guided procedure via Acoem GuideU™ interface
	360° rotation in 3D environment
	Custom number of blades / angle unit
	Automatically adjusted sampling frequency
	Automatic proposition of number of planes
	Automatic speed stability and dispersion control
	Automatic trial weight proposition
	Automatic split weight function
	Automatic balancing and trim weight calculation
Balancing acceptance	Automatic ISO 21940 balancing grade evaluation
	Automatic ISO 20816-3 vibration velocity comparison
Resume	Possibility to stop balancing procedure and restart later on
Storage	Multiple tests storage on app (limited to storage capacity of the device)
Compatibility	Android (6 or sup.), iOS (12.1 or sup.)
Validated tablet	Acoem DU or Algiz RT8 Tablet (recommended)





Pre-balancing	
Acoem Wireless Balancer App	
Quicktest	Instant vibration measurement with access to FFT in 6 measurement directions (from the 2 triaxial sensors)
Tachometer	Quick test possible with or without tachometer
Acoem app ecosystem	
Vibration spotcheck and diagnostic	Acoem Bearing Defender, Acoem Machine Defender app (requires additional sensor that can be included in the case)

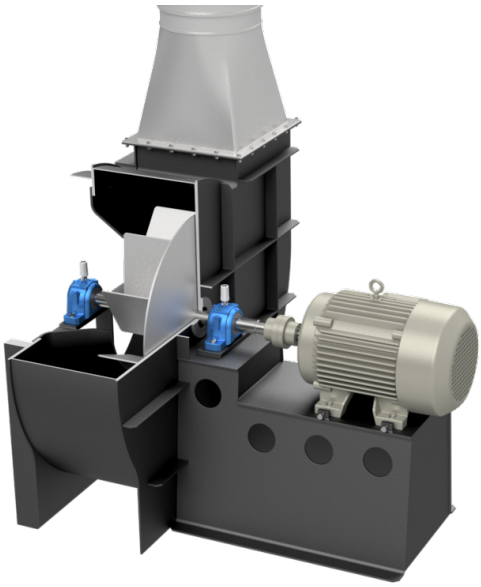
Wireless Balancer Tool: WBT-400 Hardware specifications	
Sensor performances	
Wireless sensor model	1-1301
Number of axes	3-axis
Amplitude range	± 16 g peak
Frequency response @ ±3 dB	1 Hz to 7.5 kHz
Physical	
Sensor size and weight	Ø51 mm, 105mm high, 350 grams
Time keeper size and weight	Ø51 mm, 123mm high, 515 grams
Case material	304L Stainless steel, PA12
Mounting	M6 x 1 thread
Sealing	IP67

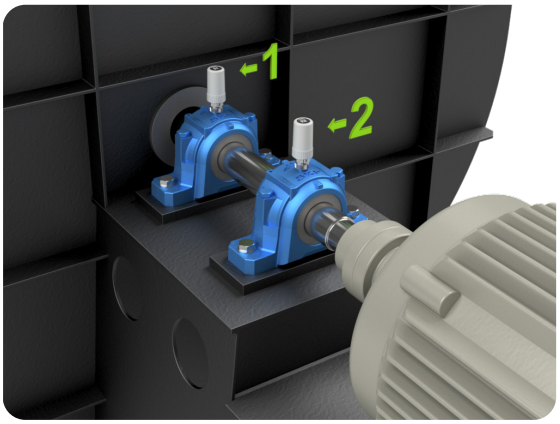
Electrical	
Standard battery	2 Replaceable batteries size AA 3,6V Recommended USB rechargeable: KEEPPOWER 14500, Topwell Power 14500
Autonomy	10 Balancing jobs before replacing / recharging batteries *Note: environment temperature, wireless distances, and storage conditions may affect the battery lifetime.*
Operating requirements	
Humidity limits	< 95% RH non-condensing
Solvent resistance	Common solvents resistant
Operating ambient temperature	-20°C < Ta < +70°C (-4°F < Ta < +158°F)
Compliances	CE, FCC, IC, CSA (UL)

Wireless Range Communication	
Radio communication	BLE 5.0 2.4GHz communication with mobile device
Wireless range	Typical 10m in industrial environment between time keeper and mobile device

What's in the case

- 2x Wireless accelerometers with magnets suited for curved surfaces
- 1x Wireless WBS™ Timekeeper with flat magnet
- Power up magnet
- Laser tachometer with M12 cable
- Magnet holder for Laser Tachometer
- Reflective tape
- Printed document Quickguide & safety instructions
- Printed calibration certificate
- Accessories box
- USB memory Stick type A&C
- 6x 3.6V AA Li-Ion batteries
- Optional: 1x Machine Defender sensor
- Optional: 1x Tablet or Acoem display unit





Download the Acoem Wireless Balancer app for free!

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