



Acoem Wireless Balancer

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

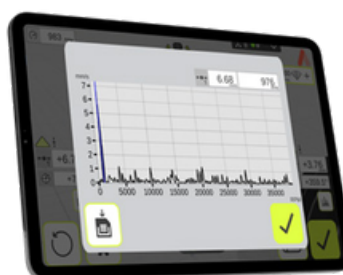
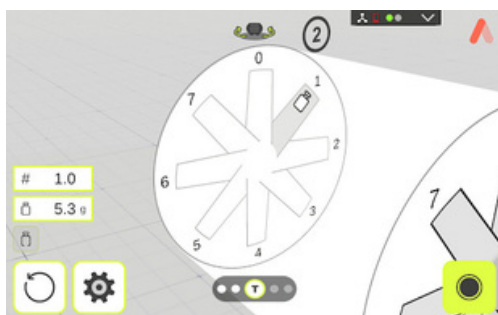
Time Saving

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	6-channel (using 4 directions for balancing) + 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)
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	$\varnothing 51$ mm, 105mm high, 350 grams
Time Keeper Size and Weight	$\varnothing 51$ 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 3,7V Recommended rechargeable batteries: KEEPPOWER 145000 (USB Rechargeable), Topwell Power 14500
Autonomy	10 Balancing jobs before replacing / recharging batteries <i>Note: environment temperature, wireless distances, and storage conditions may affect the battery lifetime.</i>

Operating requirements

Humidity Limits	< 95% RH non-condensing
Solvent Resistance	Common solvents resistant
Operating Ambient Temperature	$-4^{\circ}\text{F} < T_a < +140^{\circ}\text{F}$ ($-20^{\circ}\text{C} < T_a < +60^{\circ}\text{C}$)
Compliances	CE, FCC, IC, CSA (UL)



Wireless Range Communication

Radio Communication	BLE 5.0 2.4GHz communication with mobile device
Wireless Range	Typically, there is a 10-meter range in an industrial environment between the timekeeper and the mobile device, and up to 10 meters between the wireless accelerometers and the timekeeper.

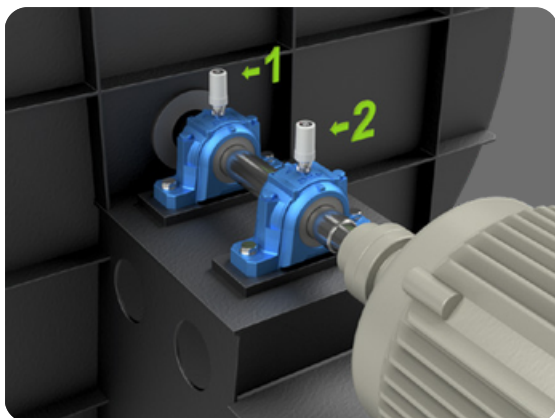
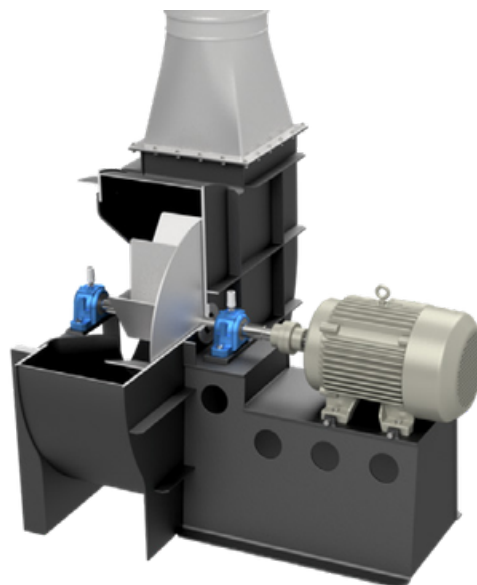


What's Included:

Each Wireless Balancer is delivered with the following included hardware:

- Wireless Accelerometers w/ Magnets suited for curved surfaces x2
- Wireless WBS™ Timekeeper w/ Flat Magnet
- Power up Magnet
- Laser Tachometer w/ M12 Connector
- Magnet Holder for Laser Tachometer
- Reflective Tape
- Accessories Box
- USB Memory Stick Type A & C
- 6x 3.7V AA Li-Ion Rechargeable batteries
- Safety Instructions
- Quick Guide
- Printed Calibration Certificate
- Tablet or Acoem Display Unit*
- Machine Defender Triaxial Sensor*

*Optional



Download the Acoem Wireless Balancer app for free!



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