



# 无人机&超轻型飞机动平衡分析仪 (无线)

WIRELESS VIBRATION BALANCER SYSTEM  
UAV & ULTRALIGHT AIRCRAFT



**4路速度信号采集通道**

4个带集成电源的输入端可用于磁性和光电传感器供电

**4 tachymeter channels**

4 inputs with integrated power supply for magnetic or optical speed sensors

**8路振动信号采集通道**

8路输入可连接振动传感器，并同步进行振动数据分析

**8 simultaneous accelerometer channels**

8 inputs for piezoelectric accelerometers with simultaneous vibratory analysis on all channels



**LEDs**  
 电源，电池余量和无线连接  
 LEDs 指示

**LEDs**  
 Power, battery level and  
 wireless link LEDs indicator

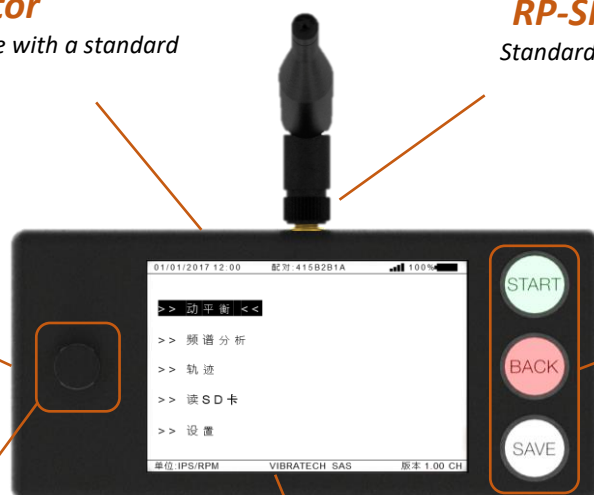
**RP-SMA 接口**  
 标准的RP-SMA天线接口  
**RP-SMA connector**  
 Standard RP-SMA connector  
 for antenna

**USB-C 接口**  
 用标准的USB-C接口进行充电和软件升级操作  
**USB-C connector**  
 Battery charge and software update  
 with a standard USB-C connector

**显示单元 / Display Unit**

**USB-C 接口**  
 用标准的USB-C接口进行充电和软件升级操作  
**USB-C connector**  
 Battery charge and software update with a standard  
 USB-C connector

**RP-SMA 连接头**  
 标准的RP-SMA接口连接天线  
**RP-SMA connector**  
 Standard RP-SMA connector for  
 antenna



**SD 卡**  
 参数和数据以纯文本格式保存在SD卡  
**SD card**  
 Parameters and measures can be  
 saved on SD card in non-proprietary  
 text file

**操作界面**  
 3个按钮 (开始，后退和保存)  
 更便捷的在菜单中切换  
**Interface**  
 3 buttons (start, back and  
 save) for an easy navigation in  
 the menus

**摇杆**  
 摇杆可以直观控制  
**Joystick**  
 Joystick for intuitive navigation

**彩色LCD屏**  
 480x320 像素3.5寸 (8.9 cm)  
 图形彩色显示屏

**LCD color screen**  
 Color interface on 480x320  
 pixels and 3.5" (8.9 cm)  
 graphical screen





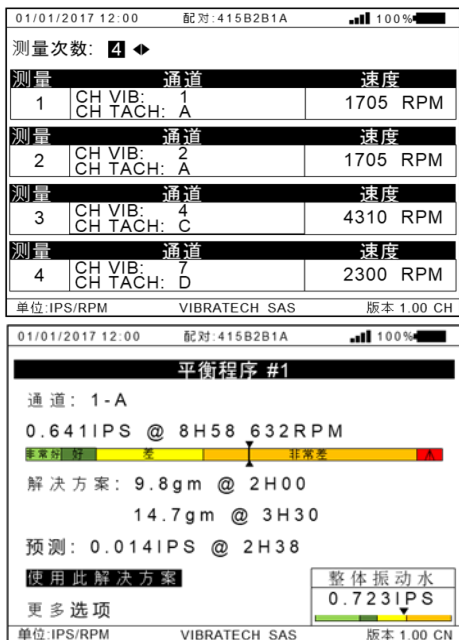
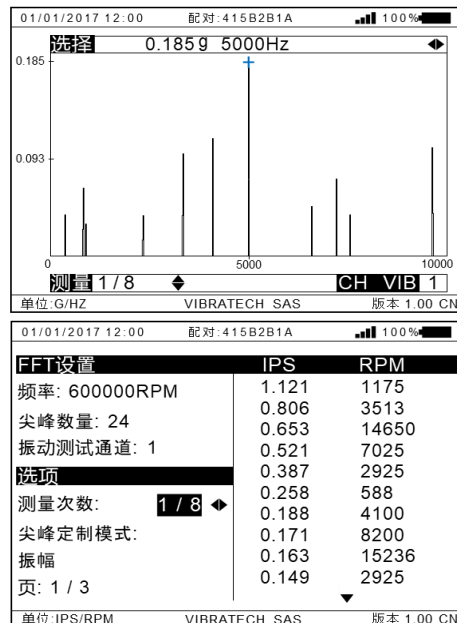
### 8通道频谱分析

每次测试同时对8组振动数据进行频谱分析，每次平衡采集达到800数值点。频谱数据以图像和尖峰的模式显示于LCD。数据可以保存在SD卡内，可以在EXCEL或者其他软件中打开。

### Spectrum analysis 8 channels

Ability to perform spectral analysis on up to 8 vibratory channels simultaneously with 800 points for each measurement. Spectrums can be displayed on the LCD screen in graphic and peak mode.

Data can be saved using the removal SD card for being used on Excel or many other software.



### 4通道动平衡仪

动平衡测试，可同时对4个振动传感器和4个转速计进行平衡测量。用户可以选择合适的测量单位（RPM/Hz, IPS/g）。动平衡数据可以保存在可拆卸SD卡。给出无人机和超轻型飞机平衡一体化解决方案。

### Dynamic balancer 4 channels

The balancing process can be performed on up to 4 rotors simultaneously with 4 tachymeters sensors and 4 vibration sensors.

Appropriate unit can be selected by the user (RPM/Hz, IPS/g).

Balancing data can be saved on the removal SD card. The integrated universal balancing chart provides balancing solutions for any type of UAV and ultralight aircraft.

### 多达12片桨叶同时测量轨迹

能够在最多12个叶片的旋转翼上进行轨迹测量，读取高度差异和超前/滞后的数据。用可拆卸式SD卡保存数据。

### Track measurement up to 12 blades

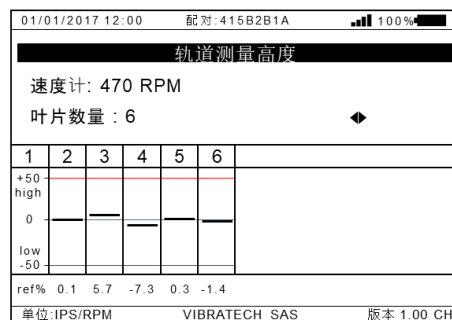
Ability to perform a track measurement on a rotor/propeller up to 12 blades simultaneously with results in height and lead/lag differences. Data can be saved on the removal SD card.

### 无线传输距离高达3.5公里 (有效飞行距离7公里)

在半径3.5公里（有效飞行距离7公里）范围内，系统通过扫描周围存在的设备，显示器可以连接到范围内的任何采集单元。

### Wireless communication up to 3.5 Km (7 Km effective flight range)


The display unit can be connected to any acquisition unit by scanning the devices present in the perimeter. The system works within 3.5 Km range (Effective flight range of 7 Km). \*



\*由广东君隆律师事务所于2022年7月12日出具的第0712号原件证明 / Attested by Authentic Certificate No.0712 issued by Gaungdong Junlong Law Firm on July 12th, 2022.

性能可能会因天气、环境、污染和任何其他可能影响采集单元和显示单元之间传输的因素而波动  
Performance may fluctuate depending on weather, environment, pollution and any other factor that may affect transmission between Display and Acquisition Unit.



AIRVIB数据采集单元 <i>AIRVIB Acquisition unit</i>		AIRVIB显示单元 <i>AIRVIB Display unit</i>	
振动通道数 <i>Number of vibratory channels</i>	8 通道 <i>8 channels</i>	同时可用振动通道 <i>Simultaneous vibratory channels</i>	8 FFT / 4 balance
速度计通道数 <i>Number of tachymeter channels</i>	4 通道 <i>4 channels</i>	同时可用速度通道 <i>Simultaneous tachymeter channels</i>	4 balance
振幅精确度 <i>Amplitude accuracy</i>	+/- 5%	自动续航 <i>Autonomy</i>	≈ 14 小时 ≈ 14 hours
相位单位 <i>Phase resolution</i>	1 度 <i>1 degree</i>	尺寸 (mm) <i>Dimensions (in)</i>	143 x 73 x 28 5,6 x 2,9 x 1,1
速度范围 <i>Tachymeter frequency range</i>	180 RPM - 30000 RPM	重量 <i>Weight</i>	≈ 260 g ≈ 0,57 lb
FFT频率范围 <i>FFT frequency ranges</i>	0 – 10 kHz	通用信息 <i>General informations</i>	
FFT精度 <i>FFT resolution</i>	800 bins	无线连接范围 (完全无遮挡, 且无干扰的情况): <i>Wireless range (unobstructed, free of interference):</i>	
自动续航 <i>Autonomy</i>	≈ 10 小时 ≈ 10 hours	EU/ASIA ETSI, NEW ZEALAND RSM and BRAZIL Anatel Compliant : 3.5 km (1.9 NM) / effective flight range: 7 Km USA FCC, CANADA IC and AUSTRALIA RCM Compliant : 3.5 km (1.9 NM) / effective flight range: 7 Km CHINA SRRC Pending: 3.5 km (1.9 NM)	
尺寸 (mm) <i>Dimensions (in)</i>	175 x 81 x 48 6,9 x 3,2 x 1,9	取决于国家868 MHz或900MHz的无线电链路 <i>868 MHz or 900 MHz radio link depending on country</i>	
重量 <i>Weight</i>	≈ 500 g ≈ 1,1 lb	模块化功能允许用户用一个显示单元接口连接控制的多 个采集单元。 <i>Modularity capability allows user to connect several acquisition units controlled by one display unit interface.</i>	
语言: 英语, 法语, 西班牙语, 中文 <i>Languages: English, French, Spanish, Chinese</i>			
测量数据保存在SD卡 <i>Measurement saving on SD card</i>			

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## 维特振动 / The Vibratech company

30多年来, Vibratech一直是飞机振动分析领域的重要参与者。Vibratech在法国和中国设有客户服务和维护中心, 负责振动分析设备的维修和校准。我们公司帮助不同的组织为他们的各类直升机开发动态调整程序。我们的专业技术团队随时为您提供所需的技术支持和帮助。培训课程可以在世界各地进行。

*For more than 30 years, Vibratech is a major actor in the vibratory analysis area on aircraft.*

*Vibratech owns a customer service and maintenance center located in France and China for repairs and calibration on vibratory analysis equipment. Our company helps various organizations to develop dynamics adjustments procedures for their flying prototypes. Our specialized technical team remains at your disposal for any technical support and assistance required.*

*Training courses can be performed all over the world.*

