



ACC 1837

IP 68 三轴加速度计

产品规格书

V2.0_20250716_CN

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IP 68 三轴加速度计 ACC 1837

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ACC 1837 加速度计是压电式加速度传感器，它内部自带了电荷放大器，采用压电陶瓷材料制造的敏感元件使其具有良好的性能，能够长期使用中保持足够的稳定性。

ACC 1837 为传感器和线缆一体式结构，它通过了 IP 68 认证，可在 50 米深水下长时间工作。

ACC 1837 经常搭配 MegaSig PM 6183 等内置 IEPE 采集卡达到优秀测试效果。

产品特点

- 高灵敏度，IP68 防水
- IEPE 供电型三轴加速度计，整体采用钛合金材质，重量轻，体积小巧
- 整体采用剪切结构设计，高带宽，高稳定性
- 应用于通用型振动测量、汽车 NVH 测试、模态试验等场景

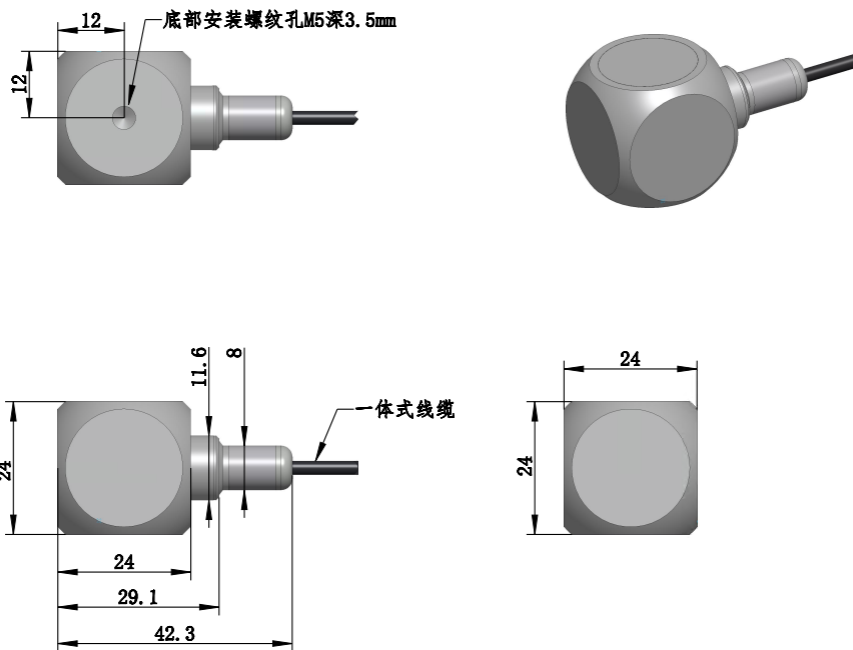
规格参数

ACC 1837	
灵敏度	500mV/g (±10%)
测量范围	±10g
频率范围	1Hz-1kHz (±5%) 0.5Hz-3kHz (±10%)
横向灵敏度	≤5%
幅值线性度	≤1%
宽带分辨率	0.0005grms
安装谐振频率	> 10kHz
冲击抵抗	500g
工作电压范围	+18~ +28V
工作电流范围	2mA~10mA (典型 4mA)
工作温度范围	-40℃~120℃
输出电压峰值	≤6V
基座应变	0.002g/με

磁灵敏度	1.5g/T
敏感元件	压电陶瓷
壳体材料	钛合金
结构形式	剪切型
重量	≤60g
输出接口	BNC
输出接口位置	侧端出线
安装接口	底部 M5 内螺纹连接
附件	M5 连接螺栓

机械尺寸

单位：mm



若产品指标更新，恕不另行通知。



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ACC 1837

IP 68 Triaxial Accelerometer

Product Specifications

V2.0_20250716_EN

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The information presented herein reflects the current or intended specifications as of the date of publication. As we continuously improve our products and add new features, the contents of this publication are subject to change without prior notice.

IP 68 Triaxial Accelerometer ACC 1837

Version: 2.0_20250716_EN



The ACC 1837 accelerometer is a piezoelectric acceleration sensor. It is equipped with a built-in charge amplifier. The sensitive element made of piezoelectric ceramic material endows it with excellent performance and ensures sufficient stability during long-term use.

The ACC 1837 sensor and cable are of an integrated structure. It has passed the IP 68 certification and can work for a long time at a depth of 50 meters.

The ACC 1837 is often paired with built-in IEPE acquisition cards such as the MegaSig PM 6183 to achieve excellent testing results.

Product Features

- High sensitivity, IP68 waterproof
- Powered by IEPE, the entire structure is made of titanium alloy, which is lightweight and compact in size
- The overall design adopts a shear structure, featuring high bandwidth and high stability
- It is applied in scenarios such as general vibration measurement, automotive NVH testing, and modal testing

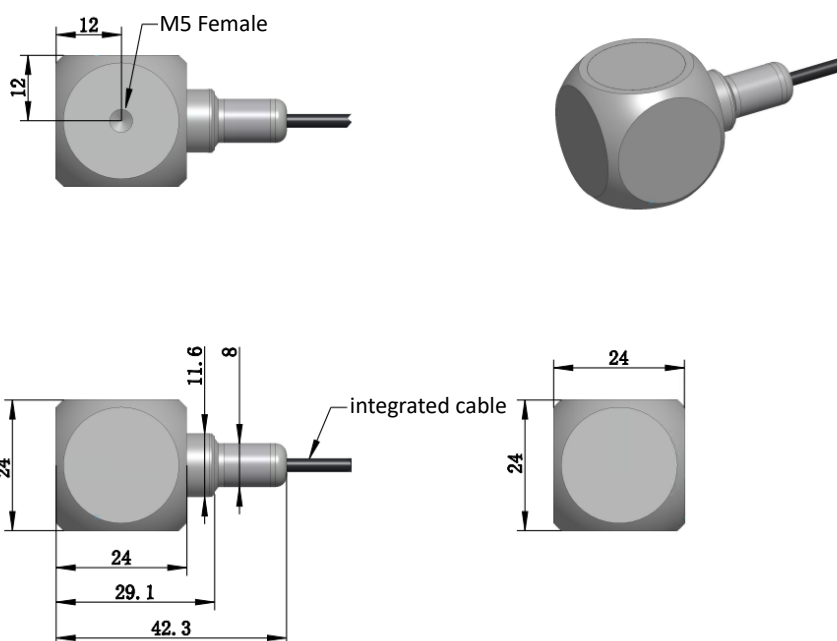
Specifications

ACC 1837	
Sensitivity	500mV/g ($\pm 10\%$)
Measurement Range	$\pm 10g$
Frequency Range	1Hz-1kHz ($\pm 5\%$) 0.5Hz-3kHz ($\pm 10\%$)
Transverse Sensitivity	$\leq 5\%$
Non-Linearity	$\leq 1\%$
Broadband Resolution	0.0005grms
Resonant Frequency	> 10kHz
Overload Limit (Shock)	500g
Working Voltage	+18~ +28V
Working Current	2mA~10mA (Typical 4mA)
Working Temperature	-40°C~120°C
Peak Output Voltage	$\leq 6V$

Base Strain Sensitivity	0.002g/ $\mu\epsilon$
Magnetic Sensitivity	1.5g/T
Sensing Element	Piezoelectric Ceramics
Housing Material	Titanium
Sensing Geometry	Shear
Weight	$\leq 60g$
Electrical Connector	BNC
Electrical Connection Position	Side
Mounting Thread	M5 Female
Accessory	M5 Bolt

Overall Dimensions

Unit: mm



MegaSig reserves the right to change specifications and accessories without notice.



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