



ACC 1861

三轴加速度计

产品规格书

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ACC 1861 加速度计是带有 TEDS 功能的压电式加速度传感器，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。

使用 1/4-28 UNF 四芯接头的线缆转出三个带 BNC 接头的同轴电缆给此系列的传感器提供 2-10mA 的恒流电源。

ACC 1861 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

- 内置 TEDS 芯片，可读取传感器信息，使用更加方便快捷
- 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、电机类产品下线检测、模态试验等场景

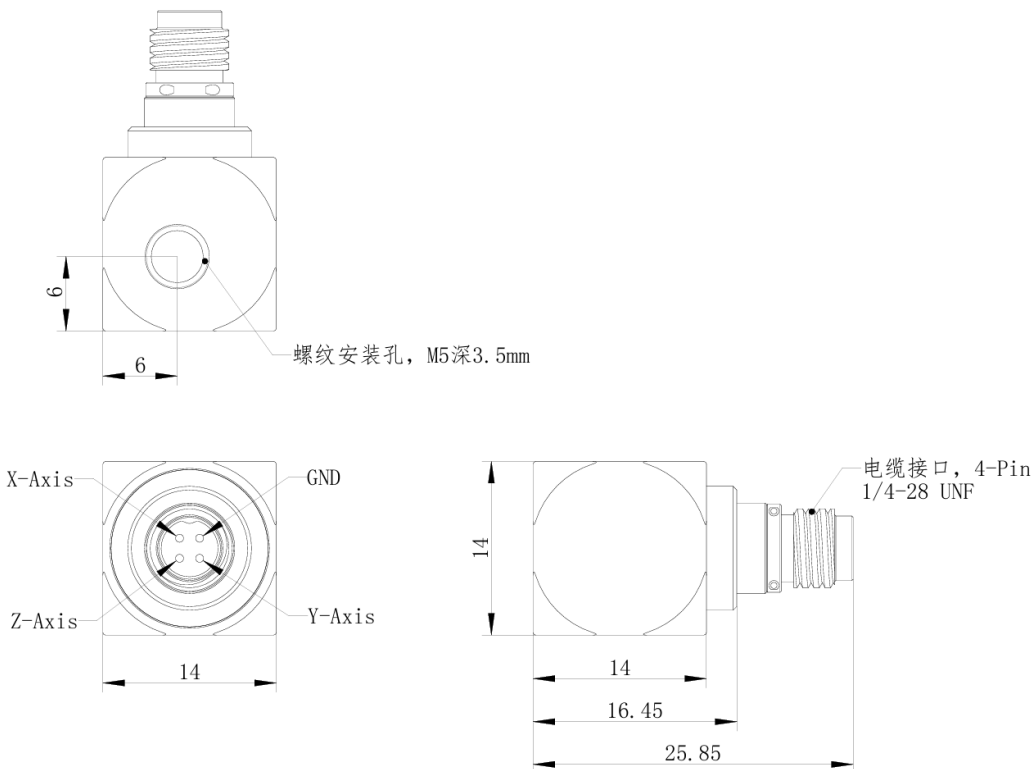
规格参数

ACC 1861	
灵敏度等级	S5
灵敏度	100mV/g (±10%)
测量范围	±50g
频率范围	0.5Hz-10kHz (±5%) 0.3Hz-10kHz (±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	> 40kHz
冲击抵抗	2000g
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°C~120°C

宽带噪声		550 μ g
频谱噪声	10Hz	63 (μ g/ $\sqrt$ Hz)
	100Hz	20 (μ g/ $\sqrt$ Hz)
	1000Hz	6.3 (μ g/ $\sqrt$ Hz)
基座应变		0.002g/ μ ϵ
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		$\leq$ 10g
输出接口		1/4-28 四芯插头
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



建议搭配使用的线缆规格

型号	图片	说明
403A		1/4-28UNF 接头转 3×BNC 接头，外径 2.4mm 蓝色 PVR 材质线缆，三轴低噪声线缆，柔软性较高，耐温 95℃，可定制长度

若产品指标更新，恕不另行通知。



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ACC 1861

Triaxial Accelerometer

Product Specifications

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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.

Triaxial Accelerometer ACC 1861

Version: 2.1_20250725_EN



The ACC 1861 accelerometer is a piezoelectric acceleration sensor with TEDS function. The sensitive element made of piezoelectric ceramic material endows it with excellent performance and ensures sufficient stability during long-term use.

Three coaxial cables with BNC connectors are spun out using a 1/4-28 UNF four-core connector to provide a constant current power supply of 2-10mA for this series of sensors.

The ACC 1861 is often paired with built-in IEPE acquisition cards such as the MegaSig PM 6183 to achieve excellent testing results.

Product Features

- Built-in TEDS chip, can read sensor information, more convenient to use
- 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, off-line inspection of motor products, and modal testing

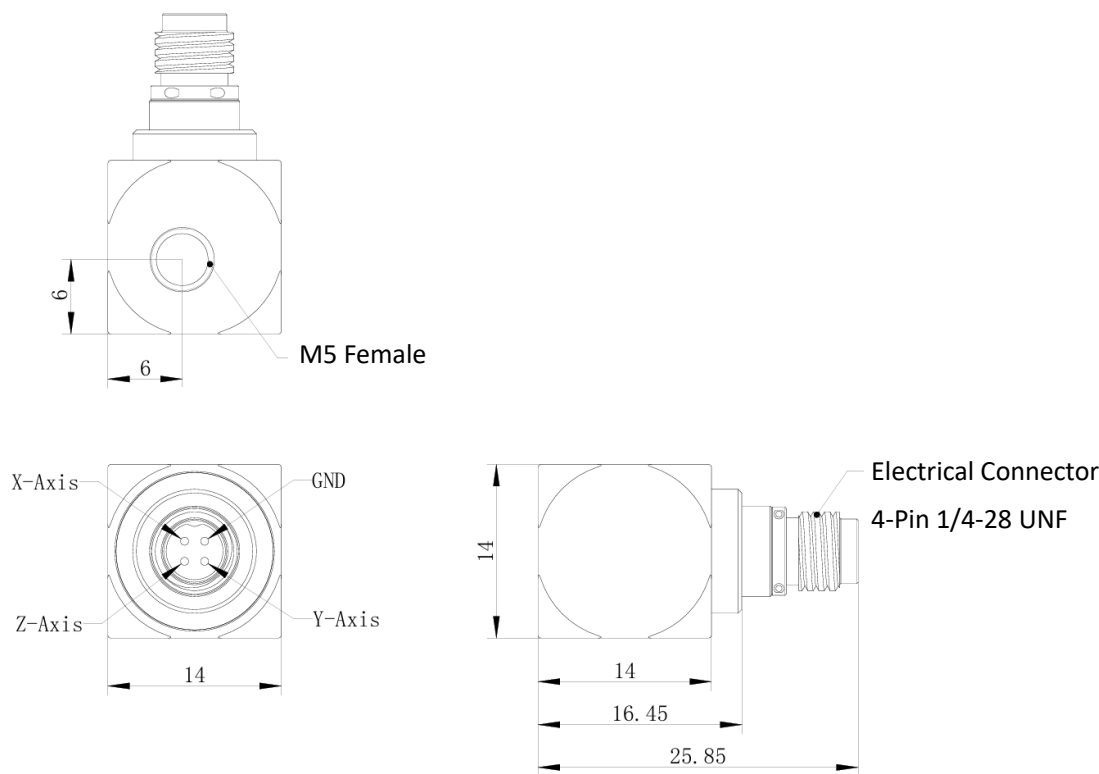
Specifications

ACC 1861	
Sensitivity Level	S5
Sensitivity	100mV/g (±10%)
Measurement Range	±50g
Frequency Range	0.5Hz-10kHz (±5%) 0.3Hz-10kHz (±10%)
Transverse Sensitivity	≤5%
Non-Linearity	≤1%
Broadband Resolution	0.0005grms
Resonant Frequency	> 40kHz
Overload Limit (Shock)	2000g
Working Voltage	+18~ +28V
Working Current	2mA~10mA (Typical 4mA)

Working Temperature		-40°C~120°C
Broadband Noise		550μg
Spectral Noise	10Hz	63 (μg/√Hz)
	100Hz	20 (μg/√Hz)
	1000Hz	6.3 (μg/√Hz)
Base Strain Sensitivity		0.002g/με
Magnetic Sensitivity		1.5g/T
Sensing Element		Piezoelectric Ceramics
Housing Material		Titanium
Sensing Geometry		Shear
Weight		≤10g
Electrical Connector		1/4-28 4-Pin
Electrical Connection Position		Side
Mounting Thread		M5 Female
Accessory		M5 Bolt

Overall Dimensios

Unit: mm



Suggested use cable specifications

Type	Picture	Explain
403A		1/4-28UNF connector to 3 × BNC connector, 2.4mm outer diameter blue PVR material cable, triaxial low-noise cable, high flexibility, temperature resistance 95℃, customizable length

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



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