

ACC 1825 微型单轴加速度计

产品规格书

ACC 1825 Micro Single-Axis Accelerometer

Product Specification

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产品简介

ACC 1825 微型单轴加速度计



ACC 1825加速度计是微型单轴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 1825采用一体式集成线缆和钛金属外壳，使用通用BNC接口，经常搭配MegaSig PM 6183等内置IEPE采集卡达到优秀测试效果。

功能特点

- IEPE供电型单轴加速度计，一体式集成线缆
- 钛金属外壳，重量轻，体积小
- 整体采用剪切结构设计，高带宽，高稳定性
- 适用于微型电机（如电动牙刷，电子烟，手表，无人机电机，电子云台等等产品）振动测试

规格参数

整体参数		
灵敏度	10mV/g (±20%)	
测量范围	±500g	
频率范围	10Hz-8kHz (±5%) 8kHz-10kHz (±10%)	
横向灵敏度	≤5%	
幅值线性度	≤1%	
宽带分辨率	0.005grms	
安装谐振频率	>50kHz	
冲击抵抗	5000g	
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	
宽带噪声	0.0075g	
频谱噪声	10Hz	750 (μg/√Hz)
	100Hz	150 (μg/√Hz)
	1000Hz	50 (μg/√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	≤0.8g	
输出接口	一体式线缆, BNC接口	
输出接口位置	顶端出线	
安装接口	胶粘	
线缆长度	3m	

机械尺寸

单位: mm



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Product introduction

ACC 1825 Micro Single-Axis Accelerometer



The ACC 1825 is a micro single-axis piezoelectric accelerometer. It features a built-in charge amplifier, and the sensing element manufactured from piezoelectric ceramic material ensures excellent performance and long-term stability.

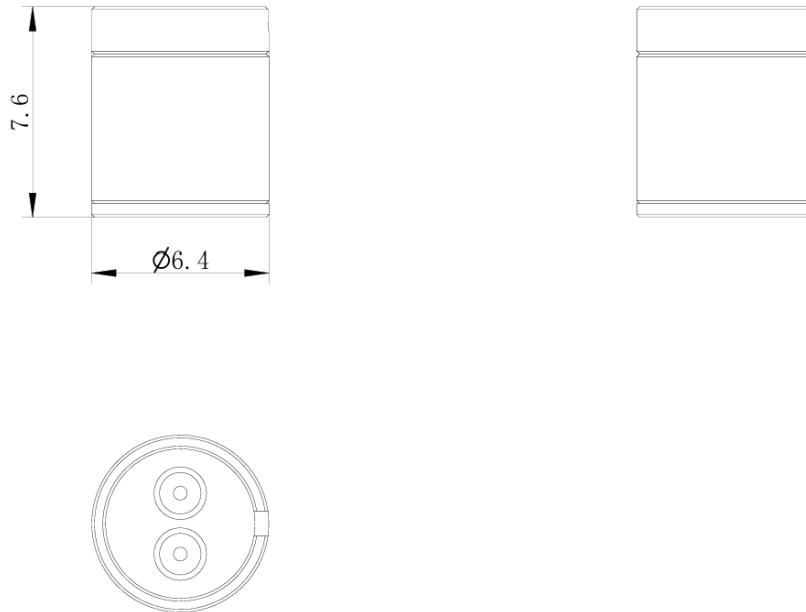
The ACC 1825 comes with an integrated cable and a titanium housing, utilizing a universal BNC connector. It is commonly used with IEPE data acquisition cards, such as the MegaSig PM 6183, to achieve outstanding test results.

Features

- IEPE-Powered Single-Axis Accelerometer with Integrated Cable
- Titanium housing, lightweight and compact in size
- Shear structure design, offering high bandwidth and high stability
- Suitable for vibration testing of micro motors (e.g., in electric toothbrushes, e-cigarettes, watches, drone motors, electronic gimbals, etc.)

Specification parameters

Specification		
Sensitivity		10mV/g ($\pm 20\%$)
Measurement range		$\pm 500\text{g}$
Frequency range		10Hz-8kHz ($\pm 5\%$) 8kHz-10kHz ($\pm 10\%$)
Transverse sensitivity		$\leq 5\%$
Amplitude linearity		$\leq 1\%$
Broadband resolution		0.005grms
Mounted resonant frequency		$> 50\text{kHz}$
Shock survival		5000g
Operating voltage range		+18~+28V
Operating current range		2mA~10mA (Typical 4mA)
Operating temperature range		-40℃~120℃
Peak output voltage		$\leq 6\text{V}$
Broadband noise		0.0075g
Spectral noise density	10Hz	750 ($\mu\text{g}/\sqrt{\text{Hz}}$)
	100Hz	150 ($\mu\text{g}/\sqrt{\text{Hz}}$)
	1000Hz	50 ($\mu\text{g}/\sqrt{\text{Hz}}$)
Base strain sensitivity		0.002g/ $\mu\epsilon$
Magnetic sensitivity		1.5g/T
Sensing element		Piezoelectric ceramic
Housing material		Titanium alloy
Sensing structure		Shear type
Weight		$\leq 0.8\text{g}$
Output connector		Integrated Cable BNC Connector
Output connector location		Top exit
Mounting method		Adhesive
Cable length		3m

Mechanical Dimensions**Unit: mm**

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