

GRAS 40PH-10

CCP 自由场阵列传声器



Freq range: 10 Hz to 20 kHz
Dyn range: 33 dB(A) to 135 dB
Sensitivity: 50 mV/Pa

GRAS 40PH-10 阵列传声器是一种低成本传声器，适用于阵列和矩阵中的通用测量。

典型应用和用途

- 多通道测量
- 声场分析
- 声功率测量
- 同时进行空间测量和瞬态测量

设计

阵列传声器设计用于安装在大型或小型阵列上。此类系统通常用于测量和定位噪声源，因此相位匹配对于获得良好的测量精度非常重要。阵列传声器的一个重要特点是传声器的相位匹配。

40PH-10 的有用频率范围很宽，最高可达 20 kHz 动态范围很大，最高可达 135 dB 这是可见削波前的峰值。

它集成了 CCP 前置放大器，内置 TEDS 芯片，可将其作为一个完整的单元进行编程 GRAS 40PH-10 需要恒流电源，如 [GRAS 12AL](#) CCP 电源或任何其他兼容 CCP 的电源。

紧密的制造公差加上 TEDS 芯片的优势，使 40PH-10 具有高度的互换性；这是用于多个阵列和矩阵时的一大优势。

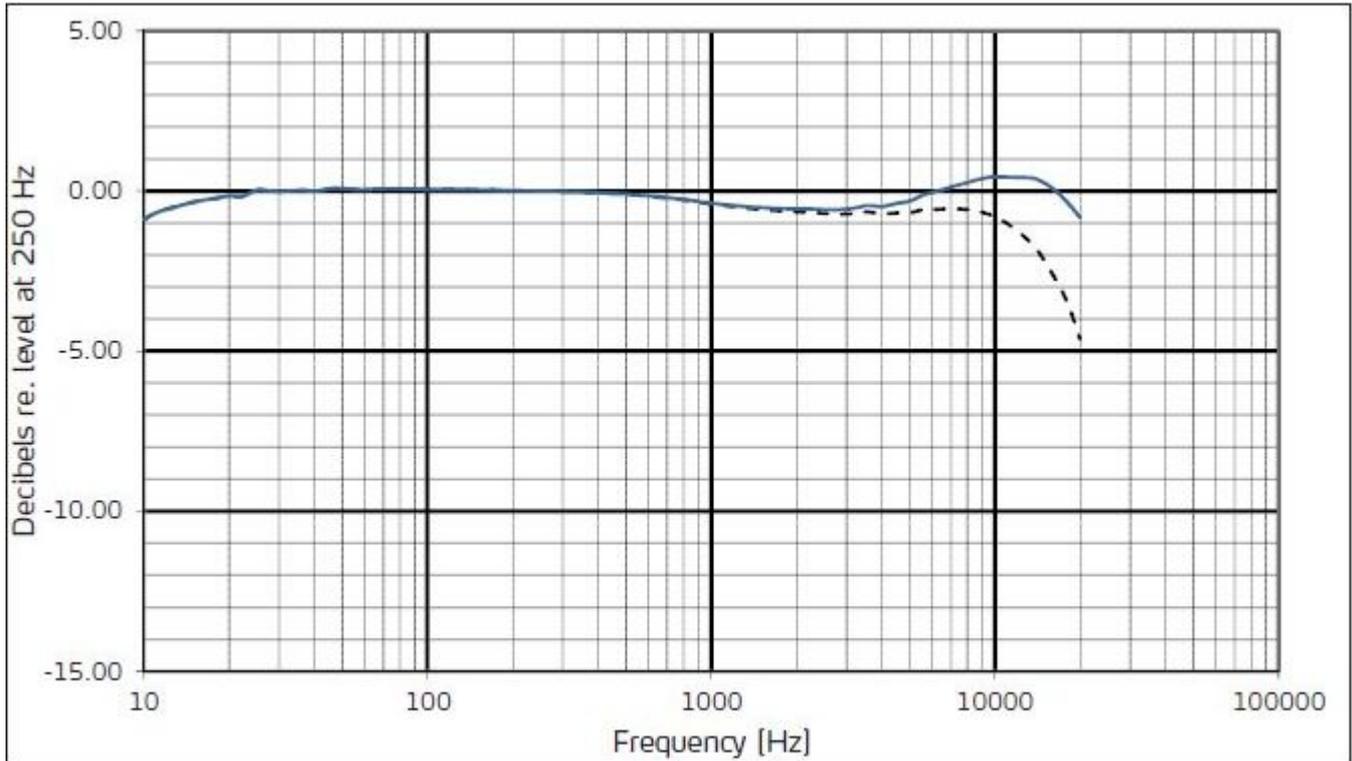
40PH-10 成本低廉，这是在设置需要多种并发瞬态和空间数据的测量时需要考虑的关键因素。

使用 [GRAS 42AA](#) 等 GRAS 活塞式传声器校准 40PH-10 与校准任何其他 GRAS 1/4 英寸传声器一样简单。

所有 GRAS 传声器在出厂前都经过单独检查和校准。每个传声器都随附一张单独的校准表。

Polarization/Connection		0 V / CCP
Frequency range (± 1.5 dB)	Hz	50 to 5 k
Frequency range (± 2 dB)	Hz	10 to 20 k
Dynamic range lower limit (microphone thermal noise)	dB(A)	< 33
Dynamic range upper limit	dB	135
Set sensitivity @ 250 Hz (± 2 dB)	mV/Pa	50
Power supply (Constant Current Power)	mA	2 to 20
Microphone venting		Front
Output impedance	Ω	< 50
Temperature range, operation	$^{\circ}\text{C} / ^{\circ}\text{F}$	-10 to 50 / -50 to 122
Temperature range, storage	$^{\circ}\text{C} / ^{\circ}\text{F}$	-20 to 60 / -4 to 140
Influence of axial vibration @1 m/s ²	dB re 20 μPa	55
TEDS (IEEE 1451.4)		27 v. 1.0
Connector type		SMB
CE/RoHS compliant/WEEE registered		Yes / Yes / Yes
Weight	g / oz	5.50 / 0.20
Phase Match		
50Hz - 100Hz		$\pm 5^{\circ}$
100Hz - 3kHz		$\pm 3^{\circ}$
3kHz - 5kHz		$\pm 5^{\circ}$
5kHz - 10kHz		$\pm 10^{\circ}$

频率响应符合 IEC 61672-1 标准

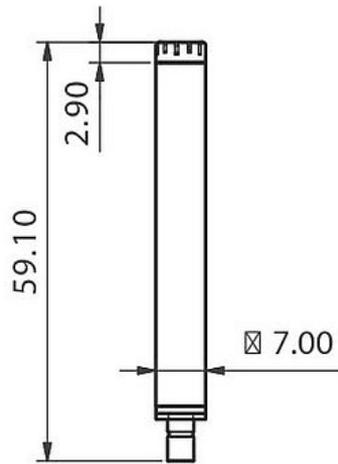


典型频率响应

上部曲线表示 0° 时的自由场响应，下部曲线（虚线）表示压力响应。

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Dimensions in mm



选购项目

GRAS AA0027	3 m SMB - BNC Cable
GRAS 12AL	1-Channel CCP Power Module with A-weighting filter
GRAS PR0002	Array Module
GRAS AM0364	Windscreens (set of 6)
GRAS RA0092	Rain-protection cap
GRAS 42AA	Pistonphone, Class 1
GRAS 42AG	Multifunction Sound Calibrator, Class 1

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GRAS Worldwide

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About GRAS Sound & Vibration

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones to industries where acoustic measuring accuracy and repeatability is of utmost importance in R&D, QA and production. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, and consumer electronics. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect and trust.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at www.GRASacoustics.com

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