

GRAS 26TC

1/4英寸前置放大器（含3米集成线缆）



频率范围 2 Hz - 200 kHz

Noise: 1.8 μ V

Gain: -0.25 dB

特别功能：通用型

GRAS 26TC 1/4" 前置放大器是一款专为使用电容式传声器进行声学测量而优化的紧凑型坚固设备。该设备具有极低的本底噪声水平、超宽的动态范围，以及从 2 Hz 到 200 kHz 的频率响应。

设计

所有 GRAS 传声器前置放大器均基于一种小型陶瓷厚膜基板，该基板具有极高的输入阻抗。陶瓷基板通过屏蔽环进行屏蔽，以最大限度地减少寄生电容和微音器干扰的影响。外壳采用不锈钢材质，确保最大强度和耐用性。该前置放大器的小型尺寸使其在潮湿环境下仍能可靠运行，这得益于内部功率耗散产生的热量。

26TC 前置放大器标配内置 TEDS 芯片，可与装配的传声器编程为集成单元。产品随附 GRAS GR0010 适配器，兼容 GRAS 1/2 英寸传声器。

动态范围

GRAS 26TC 前置放大器兼容单端与双端供电模式，支持 28-120 VDC 单端供电或 ± 14 - ± 60 VDC 双端供电。当采用高压供电 120 VDC 或 ± 60 VDC 时，其动态范围可超过 140 dB

噪声

GRAS 26TC 采用陶瓷基板电路设计，精选低噪声元件，实现极低的本底噪声。其电路自噪声水平极低，系统总噪声主要取决于传声器的热噪声。

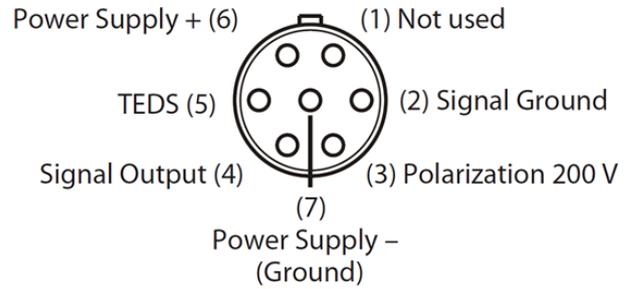
频响

GRAS 26TC 前置放大器的低频截止频率主要由前置放大器的输入阻抗和传声器的电容决定（参见规格中的图表 20 pF 6.5 pF 和 3 pF 的电容值分别对应 1/2 "、1/4 " 和 1/8" 传声器的典型电容值。高频截止频率由前置放大器驱动电容负载的能力（上升率）决定，该能力受电缆影响。对于大信号，在进行测量时必须考虑这些参数的影响。规格中的图表显示了 GRAS 26TC 在不同电缆长度对应的电容负载下的大信号响应。输出电平以相对于 1V 的分贝表示。电缆的典型电容为 100pF/m 30pF/英尺）。

接口

26TC 前置放大器标配 3 米轻量化线缆，终端配置 7-pin LEMO 1B 系列接口。该线缆直径仅 2.5 毫米，可耐受 -40°C 至 +150°C 的极端温度环境，并随附 GR0010 适

配器（用于连接 GRAS 1/2 英寸传声器）。



7-pin LEMO plug 1B male (ext. view)

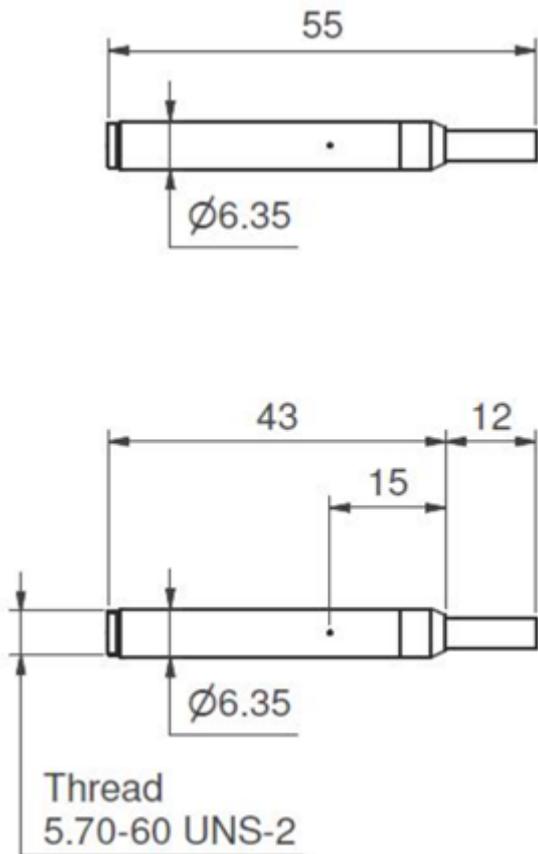
典型应用与使用

通用型前置放大器

高频测量

高压测量

Frequency range (± 0.2 dB) with 18 pF microphone dummy	Hz	2 to 200 k
Slew rate	V/ μ s	20
Input impedance	G Ω // pF	20 // 0.4
Output impedance	Ω	55
Output Voltage Swing, max. @ ± 14 V/+28V power supply	Vp	10
Output Voltage Swing, max. @ ± 60 V/+120V power supply	Vp	50
Noise (A-Weighted) max.	μ V	2.5
Noise (A-Weighted) typ.	μ V	1.8
Noise (Linear 20 Hz – 20 kHz) max.	μ V	6
Noise (Linear 20 Hz – 20 kHz) typ.	μ V	3.5
Gain	dB	-0.25
Power supply, single	V	28 to 120
Power supply, balanced	V	± 14 to ± 60
DC-offset, min., single supply	V	$0.5 \times V_s - 1$
DC-offset, max., single supply	V	$0.5 \times V_s + 4$
DC-offset, balanced supply	V	-1 to 4
Temperature range, operation	$^{\circ}$ C / $^{\circ}$ F	-30 to 70 / -22 to 158
Temperature range, storage	$^{\circ}$ C / $^{\circ}$ F	-40 to 85 / -40 to 185
Humidity range non condensing	% RH	0 to 95
TEDS (IEEE 1451.4)		27 v. 1.0
Connector type		7-pin LEMO 1B
CE/RoHS compliant/WEEE registered		Yes / Yes / Yes
Weight (without cable)	g / oz	6 / 0.2
Weight (with cable + LEMO connector)	g / oz	50 / 1.8



GRAS AA0008	3 m LEMO 7-pin - LEMO 7-pin Cable
GRAS AL0029	1/4" Microphone Holder, POM
GRAS AL0013	1/4" Microphone Holder, Stainless Steel
GRAS AL0005	Swivel head
GRAS AL0006	Tripod
GRAS RA0063	Adapter for 1/8" microphone and 1/4" preamplifier
GRAS RA0006	Right-angled (90°) Adapter for 1/4" Microphone and 1/4" Preamplifier
GRAS RA0002	Right-angled adjustable adapter for 1/2" mic/ 1/4" preamp.
GRAS RA0080	6pF Preamplifier-input adapter for 1/4" microphones
GRAS 12AA	2-Channel Power Module with gain, filters and SysCheck generator
GRAS 12AQ	2-Channel Universal Power Module with signal conditioning and PC interface
GRAS 12BC, 12BF and 12BD	LEMO Power Modules with TEDS Support

GRAS Worldwide

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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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