

GRAS 26CA

1/2" CCP Standard Microphone Preamplifier with BNC Connector



Freq range: 2.5 Hz - 200 kHz
Noise: 1.8 μ V Gain: -0.30 dB
Special feature: General purpose

The GRAS 1/2" Preamplifier GRAS 26CA is a general purpose preamplifier optimized for use with prepolarized condenser microphones. It is a small, robust unit and uses a GRAS CCP power supply (ICP ®), e.g. GRAS 12AL. It has a very low inherent noise level, and a large dynamic range and a frequency response from below 2 Hz to above 200 kHz.

Typical applications and use

CCP inputs (ICP ®)

Prepolarized microphones

1/2" precision microphones

High levels and high frequencies

Inc.

* Transducer Electronic Data Sheet - IEEE-P1451.4

Design

The GRAS 26CA 1/2" CCP Standard Preamplifier is a small, robust unit and uses a CCP power supply (ICP ®), e.g. GRAS 12AL. It has a very low inherent noise level, a large dynamic range and a frequency response from below 2 Hz to above 200 kHz.

Its small ceramic thick-film substrate has a very high input impedance, and is shielded by a guard ring to minimise the influence of stray capacitance and microphonic interference.

The 26CA is delivered with Generation II TEDS. The calibration data is programmed into the built-in TEDS according to IEEE 1451.4 using UDID I27-0-0-0U. If your measurement platform supports Transducer Electronic Data Sheets you will be able to read and write data like properties and calibration data.

Generation II TEDS chip (DS2431) may require updated system software.

It can be used with all GRAS prepolarized microphones, namely: 1/2" microphones: GRAS 40AE, 40AD and 40AQ 1/4-inch microphones: GRAS 40BE and 40BD, using the optional 1/2"-inch to 1/4-inch adaptor RA0019.

It has an integrated BNC output connector. The casing is made of stainless steel for maximum strength and durability.

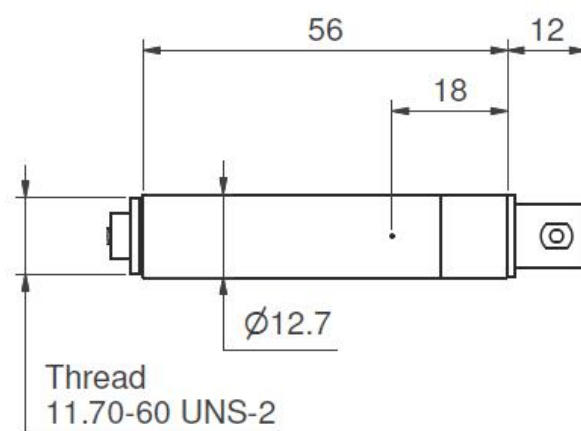
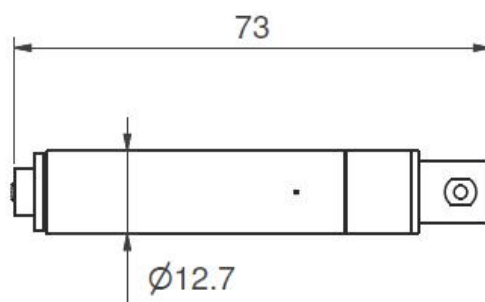
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|---|-----------------------------|------------------------|
| Frequency range (± 0.2 dB) with 18 pF microphone dummy | Hz | 2.5 to 200 k |
| Slew rate | V/ μ s | 20 |
| Input impedance | G Ω // pF | 20 // 0.4 |
| Output impedance | Ω | < 50 |
| Output Voltage Swing, min. @ 24-28 V CCP voltage supply | Vp | 8 |
| 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 | -0.30 |
| Power supply (Constant Current Power) | mA | 2 to 20 (typical 4) |
| DC bias voltage, typ. | V | 12 |
| 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 - 95 |
| TEDS UDID (IEEE 1451.4) | | I27-0-0-0U |
| Connector type | | BNC |
| CE/RoHS compliant/WEEE registered | | Yes / Yes, Yes |
| Weight | g / oz | 26.0 / 0.92 |

Conditions: 23 $^{\circ}$ C Ambient temperature, 4 mA / 24 V open loop CCP voltage, 18 pF dummy microphone, 3 m output coax-cable.

GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

Dimensions in mm



Optional items

| | |
|-----------------------------|--|
| GRAS AA0035 | 3 m BNC - BNC Cable |
| GRAS AL0008 | 1/2" Microphone Holder, POM |
| GRAS AL0012 | 1/2" Microphone Holder, Stainless Steel |
| GRAS AL0005 | Swivel head |
| GRAS AL0006 | Tripod |
| GRAS RA0019 | Adapter for 1/4" microphone and 1/2" preamplifier |
| GRAS RA0073 | Adapter for 1" microphone and 1/2" preamplifier |
| GRAS RA0190 | Right-angled (90°) Adapter for 1/2" Microphone and 1/2" Preamplifier |
| GRAS RA0018 | 20 dB Attenuator for prepolarized 1/2" microphones |
| GRAS RA0062 | 20 pF Preamplifier-input Adapter for 1/2" preamplifiers |
| GRAS 12AL | 1-Channel CCP Power Module with A-weighting filter |
| GRAS 12AQ | 2-Channel Universal Power Module with signal conditioning and PC interface |

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GRAS Worldwide

Subsidiaries and distributors in more
than 40 countries

HEAD OFFICE, DENMARK
GRAS SOUND & VIBRATION
Skovlytoften 33
2840 Holte
Denmark
Tel: +45 4566 4046
www.GRASacoustics.com
gras@grasacoustics.com

USA
GRAS SOUND & VIBRATION
9290 SW Nimbus Avenue
Beaverton, OR 97008
Tel: 503-627-0832
Toll Free: 800-231-7350
www.GRASacoustics.com
sales-usa@grasacoustics.com

UK
GRAS SOUND & VIBRATION
Unit 115, Gibson House,
Ermine Business Park, Huntingdon,
Cambridgeshire, PE29 6XU
Tel: +44 (0) 7762 584 202
www.GRASacoustics.com
sales-uk@grasacoustics.com

CHINA
GRAS SOUND & VIBRATION
Room 315, RuiBo Center(T1)
Lane683, Shenhong Rd,
Minhang District,
Shanghai, China, 201107
Tel: +86 21 64203370
www.GRASacoustics.cn
cnsales@grasacoustics.com



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 and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

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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