GRAS 12AL

1-Channel CCP Power Module with A-weighting filter

Connection: CCP
Channel(s): 1

The GRAS 12AL CCP (Constant Current Power) Supply is a low-noise single-channel power supply for CCP transducers and preamplifiers.

GRAS Sound & Vibration
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Typical applications and use

- Power supply for CCP transducers and preamplifiers
- General-purposes measurements
- Precision measurements
- Wide-band measurements
- Switchable A-weighting network
- Low noise
- Battery operated

Design

The 12AL will supply a transducer with a constant current of 4 mA. It has a wide operating frequency range from about 1 Hz (depending on load impedance) to 200 kHz. It also has an A-weighting filter that can be switched in or out.

The 12AL can be powered by either two internal AA alkaline batteries or an external 3–6 VDC power source. Both the AA batteries and the AB0005 6 VDC power supply are included.

LEDs are used to indicate battery condition; green for power OK and red for battery low. Another red LED is used to indicate a cable break, short circuit, and overload.

The 12AL has zero gain since the output signal from the transducer is wired directly via 22 µF to the output connector. Zero gain is also preserved at 1 kHz when the A-weighting network has been switched in.

The size and weight of the 12AL make it a compact and handy power supply for CCP transducers both in the laboratory and in the field.

Warranty

All GRAS products are made of high-quality materials that will ensure life-long stability and robustness. The 12AL is delivered with a 2-year warranty. The warranty does not cover products that are damaged due to negligent use.

Service and Repairs

All repairs are made at GRAS International Support Center located in Denmark. Our Support Center is equipped with the newest test equipment and staffed with dedicated and highly skilled engineers. Upon request, we make cost estimates based on fixed repair categories. If a product covered by warranty is sent for service, it is repaired free of charge, unless the damage is the result of negligent use or other violations of the warranty.

Specifications

CONDITIONING		.
Frequency response (±3.0 dB) (with 10 kΩ load)	Hz	0.7 to 200 k
Frequency response (±3.0 dB) (with 100 kΩ load)	Hz	0.07 to 200 k
Output channel(s)		1
Output impedance, with A-weighting	Ω	100 in serial with 22µF
Output impedance, without A-weighting	Ω	As source in serial with 22µF
Direct coupling input to output		No
Inherent noise, A-filter "on" and with dummy microphone (20 Hz to 20 kHz),	µVrms	15
Inherent noise, A-filter "off" and with dummy microphone (20 Hz to 20 kHz),	µVrms	4
A-weighting filter according to		IEC 61651 Type 0
Linear mode		Yes
Type		Constant Current Power (CCP)
Input channel, CCP		1
Input channel(s), traditional power supply		1
CCP preamplifier supply @ +28 V	mA	4
Overload indication		Yes
PC controlable		No
External filter option		No
Power amplifier overload detection		No
POWER SUPPLY		.
Power supply, battery		2 x LR6 (AA)
Power supply, external	Vdc	3 to 6
Power consumption	mA	50 to 120
Battery life	h	24
Battery low indication		Yes
Temperature range, operation	°C / °F	-10 to +50 / 14 to 122

Weight	g / oz	110.00 / 3.88
Weight with batteries	g / oz	160 / 5,6

Included items

GRAS AB0005	Mains/line adapter. AB0005 is a 100-240 VAC to 6 VDC power supply that includes exchangeable EU, US, UK, and Type I plugs.
AA alkaline batteries	Batteries included

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

GRAS Worldwide

Subsidiaries and distributors in more than 40 countries

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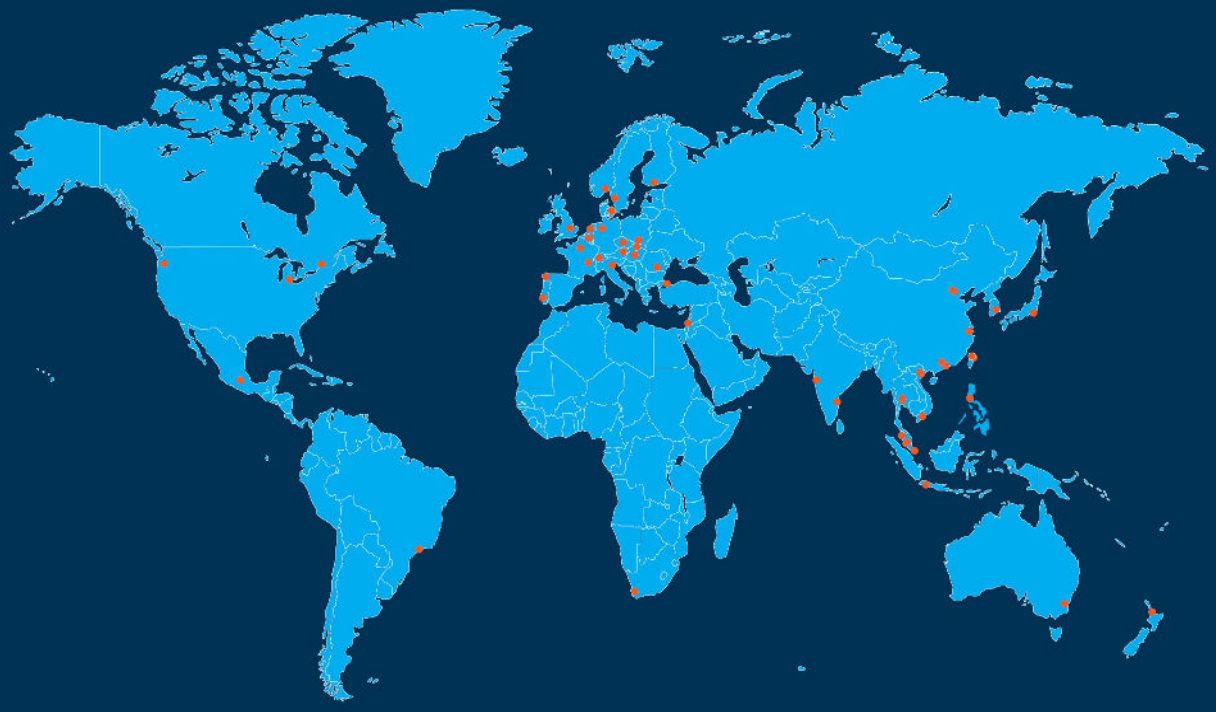

About GRAS Sound & Vibration

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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