

# GRAS 12BA, 12BE AND 12BB

CCP Power Modules with TEDS Support



Microphone power: CCP  
Channel(s): 1, 2 or 4  
TEDS via USB

12BA, 12BE and 12BB are 1-, 2- and 4-channel CCP power modules, respectively. They have SysCheck2™ and TEDS support and are powered by USB.

The GRAS 12BA, 12BE and 12BB are, respectively, single- two- and four-channel USB-powered CCP power modules with TEDS support, and they are able to take full advantage of GRAS [SysCheck2™](#)-enabled microphones, such as [GRAS 246AE](#) and [246AO](#).

These power modules provide power to microphone sets without signal degradation, gain modification, or attenuation.

This series excels as a simple and cost-effective interface between TEDS-enabled measurement microphones and any [Audio Precision APx series analyzer](#), which will automatically extract TEDS data for seamless integration. Full

[SysCheck2™](#) functionality is also automatically available when connected to [APx500 release v7.0 Measurement Software](#) with GRAS 12BA, 12BE or 12BB power modules and an [Audio Precision APx series analyzer](#), or with an [Audio Precision APx series analyzer](#) with CCP and TEDS read/write capability.

However, these power modules can also be used with other brands. In this case, a TEDS utility program provides access to TEDS data on a PC. This program can be downloaded [here](#). The SysCheck2 Software Development Kit is available from the microphone product pages.

Power for the 12Bx series is provided through a USB cable using a USB 2.0 or USB 3.0 port and a USB-C port on the power module.

If more channels are needed, multiple power modules can be used concurrently.

Type		Constant Current Power (CCP)
------	--	------------------------------

## USB Interface

Interface		Type A Peripheral Interface
Version		USB C/USB 2.0
Power		USB +5 V, 500 mA max

## Microphone Channel

Channel(s)		BNC
Max input voltage (limited by 24 V microphone power)	$V_{peak}$	24
Power	mA	4
Coupling		AC, 10 Hz high-pass filter

## General

Bandwidth	Hz	10 to 20 ( $\pm 0.06$ dB) 20 to 200 k ( $\pm 0.03$ dB)
Noise, input shorted, 10 Hz to 20 kHz	$\mu V$ RMS	< 2.0
Temperature range, operation	$^{\circ}C / F$	0 to +45 / 32 to 113
Temperature range, storage	$^{\circ}C / F$	-40 to +75 / -40 to 167
Humidity	Up to 40 $^{\circ}C$ /104 F	90%, non-condensing
EMC		EN 61326-1: 2013 Class B
Safety		UL/EN/IEC 62368-1, Second Edition
Dimensions, width x height x depth	mm inches	108 x 44.2 x 193.8 4.25 x 1.74 x 7.63
Weight (12BA 12BE 12BB)	g/oz	397/14 435/15.3 510/18

## Included

GRAS 12BA, 12BE or 12BB	CCP Power Module with USB Connection
-	USB Cable

## Optional

GRAS AA0033	BNC-BNC cable, 1 meter
GRAS AA0034	BNC-BNC cable, 2 meters
GRAS AA0035	BNC-BNC cable, 3 meters

# 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](http://www.grasacoustics.com)  
[gras@grasacoustics.com](mailto:gras@grasacoustics.com)

**USA**  
**GRAS SOUND & VIBRATION**  
5750 S.W. Arctic Drive  
Beaverton, OR 97005  
Tel: 503-627-0832  
Toll Free: 800-231-7350  
[www.grasacoustics.com](http://www.grasacoustics.com)  
[sales-usa@grasacoustics.com](mailto: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](http://www.grasacoustics.com)  
[sales-uk@grasacoustics.com](mailto:sales-uk@grasacoustics.com)

**CHINA**  
**GRAS SOUND & VIBRATION**  
Room 303, Building T6  
Hongqiaohui, 990, Shenchang Road  
Minhang District, Shanghai  
China. 201106  
Tel: +86 21 64203370  
[www.grasacoustics.cn](http://www.grasacoustics.cn)  
[cnsales@grasacoustics.com](mailto: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](http://www.grasacoustics.com)

[grasacoustics.com](http://grasacoustics.com)

**GRAS** Sound  
& Vibration  
An Axiometrix Solutions Brand