

General purpose power unit/amplifier

P702B

SPECIFICATIONS

INPUT CHARACTERISTICS

Voltage to transducer	27 VDC
Current to transducer, $\pm 20\%$	2.4 mA
Input impedance	$>1 \text{ M}\Omega$

OUTPUT CHARACTERISTICS

Output impedance	100 Ω
Maximum output voltage	1:1 with DC decoupling
Noise, 2 Hz - 25 kHz, referred to input: Maximum, gain = 10 or 100	$<4.5 \text{ }\mu\text{V rms}$

Spectral noise, referred as input,
dB relative to $1\text{V}/\sqrt{\text{Hz}}$:

10 Hz	-149 dB
100 Hz	-154 dB
1 kHz	-154 dB
10 kHz	-154 dB

TRANSFER CHARACTERISTICS

Gain, acceleration	1, 10, 100
Gain, velocity	1, 10, 100
Gain accuracy:	
Maximum error for acceleration mode	$\pm 0.3 \text{ dB}$
Maximum error for velocity mode	$\pm 0.5 \text{ dB}$

Frequency response, -3 dB :

Acceleration	0.5 - 50,000 Hz
Velocity	1.0 - 20,000 Hz

Amplitude nonlinearity	$<1\%$
Total harmonic distortion	$<1\%$

POWER REQUIREMENTS

Internal batteries	(3) 9V alkaline
Battery life	80 hours (typical)
External power, optional	24 - 30 VDC

ENVIRONMENTAL

Temperature range	0° to +55°C
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PHYSICAL CHARACTERISTICS

Dimensions, W x H x D	3 x 1½ x 6"
Weight	1.25 lb
Connectors:	
Signal input	BNC
Signal output	BNC

Accessories available: NC3 Ni-Cad battery kit; LA704B line adaptor (110V); LA704B-220 line adaptor (220V); CC701 series charge converter



Key features

- Amplifier gain of 1, 10, 100
- Acceleration or velocity output
- Visible overload/fault alarm
- Manufactured in ISO 9001 facility

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.