

Model FMB3002 Filter/Amplifier Chassis

- 1 or 2 Channels
- Choice of AC or, DC Power
- Standard Battery Power Operation
- Single-Ended or Differential Input Configuration
- BNC and Terminal Block Connections
- Accepts Krohn-Hite 3FMB Modules
- Mix and Match Modules



DESCRIPTION

The New Krohn-Hite Model FMB3002AC and FMB3002DC chassis are two channel, compact filter chassis that provide housing for the Krohn-Hite Fixed Frequency Filter/Amplifier 3FMB Modules. Each chassis has both input BNC (single-ended) and terminal block (differential) connectors. Both output connectors are BNC. Internal sockets are provided for each channel making installation and removal of the 3FMB modules easy when updating or changing to different type filter/amplifier module requirements. Each chassis provides for battery power. Two high energy 9V batteries are recommended.

FMB3002AC AC POWER CHASSIS

The FMB3002AC, ac powered chassis, provides its own $\pm 15V$ power supply for powering the 3FMB filter/amplifier modules. Each channel has associated BNC and terminal block input and output connectors for signal connections. Battery power is standard and requires two 9V batteries to operate in this mode. An LED indicator is provided for each channel to indicate that the channel is active.

DC POWERED CHASSIS

The FMB3002DC, dc powered chassis, has the standard input and output connectors as the FMB3002AC and must be powered by an external bipolar power source. A rear panel, 3-terminal block connector is provided for all power connections. Power source must be $\pm 9Vdc$ to $\pm 15Vdc$. Battery power is also standard and requires two 9V batteries to operate in this mode. An LED indicator is provided for each channel to indicate that the channel is active.

UNDER BATTERY POWER

When the FMB3002AC or FMB3002DC is battery operated, two 9V, high energy, lithium batteries are required. High energy batteries are recommended for extended operation. Battery life using the high energy batteries is up to 8 hours when 2 3FMB modules are installed. Standard alkaline battery life is typically 2 hours.

APPLICATIONS

Applications for the FMB3002 includes: anti-alias filtering, data acquisition systems, aerospace (sonar and navigation), sound and vibration testing, medical electronics, communication systems, real and compressed time data analysis, noise elimination and signal reconstruction and more.

SPECIFICATIONS *Specifications apply at $\pm 9\text{Vdc}$ to $\pm 15\text{Vdc}$.*

Number of Channels: 1 or 2.

Power Supply Voltage ($\pm\text{Vs}$): Operating range: $\pm 9\text{Vdc}$ to $\pm 15\text{Vdc}$; Maximum safe voltage: $\pm 18\text{Vdc}$.

Current: Single channel, 35mA, 2 channel, 70mA.

USER DEFINED OPTIONS

Number of Channels: 1 or 2

Type: Butterworth or Bessel

Function: Low-pass, high-pass, band-pass.

Cutoff (corner) Frequency: Value between 0.1Hz to 1MHz, $\pm 2\%$. Frequency will depend on gain requirements.

Number of Poles (dB/octave): 1 (6dB), 2 (12dB), 3 (18dB), 4 (24dB) . . . 8 (48dB) and 16dB (96dB).

Input Configuration: Differential or single-ended.

Input Gain: Any value between 1 and 100. It is recommended to amplify small input signals in order to improve overall signal-to-noise ratio.

Output Gain: Any value between 1 and 100.

ACCESSORIES

3FMB Filter/Amplifier Modules

3-Terminal Mating Connector

Line Cord

Specifications subject to change without notice.