

Model 4006

NIM Bin & Power Supply



SIGNAL RECOVERY

FEATURES

- ◆ Accommodates up to 3 Model 4121B / 4161A NIM Modules
- ◆ Compact size
- ◆ Integral overvoltage protection
- ◆ LED fault indicators
- ◆ Up to 120 W of DC power available

APPLICATIONS

- ◆ Boxcar Averager systems using one, two or three modules
- ◆ Benchtop systems where a conventional NIM rack is too large

DESCRIPTION

The compact Model 4006 Minibin and Power Supply is the ideal solution for building boxcar systems using our boxcar modules. Its compact 9½" x 12½" (240 mm x 320 mm) footprint minimizes the space required on the benchtop. It can operate at full power while sitting on a solid surface, because rear intake and exhaust of cooling air eliminates the need to provide free air flow from below. The Model 4006 accommodates up to three dual-width NIM modules such as the models 4121B and 4161A, although it can also be used with single-width modules as well.

In addition to the standard ± 24 V and ± 12 V dc power, ± 6 V is provided to serve the high-current demands of TTL and ECL logic such as is used in the models 4121B and 4161A. The unit includes extensive protection for the power supply. Crowbar circuits are provided on the ± 6 V power lines to protect TTL and ECL integrated circuits against overvoltage, while all six of the DC power lines incorporate protective fold-back circuits that automatically reduce the output voltage in case of an excessive load current or a short circuit.

Six status LEDs indicate the status of each DC output, glowing green when the supply is operating correctly and red under fault conditions. A further LED shows the temperature of the internal heatsinks, turning on when the temperature is within 15°C of its maximum safe value. All heatsinks are internal to the unit and are forced-air cooled, so there are no hot external surfaces that can be accidentally touched.

Specifications

General

NIM Bin and Power Supply with line input for accommodating and powering up to 6 single-width (or 3 dual width) NIM modules

Line Input

Standard IEC connector and selectable 100, 120, 220 and 240 V AC input voltages at 50 or 60 Hz

Output Voltages - NIM Connectors

± 24 V DC, ± 12 V DC, ± 6 V DC and 115 V AC

Output Voltages - Preamp Power Connectors

Two 9-pin subminiature D type female connectors are also provided and can be used for powering auxiliary apparatus. These outputs are in parallel with the NIM connectors and supply the following voltages:
 ± 24 V DC, ± 12 V DC and ± 6 V DC

Total Power Output

The total current on each rail must not exceed ± 24 V DC @ 750 mA, ± 12 V DC @ 1.5 A, ± 6 V DC @ 4.0 A and 115 V AC @ 500 mA, subject to a total power output that is dependent on the ambient temperature, being 120 W DC at 23°C and 80 W DC at 50°C

Indicators

LED indicators show status of DC output voltages, internal temperature and line input

Dimensions

9½" wide x 12½" deep x 14" tall
(240 mm x 320 mm x 352 mm)

Weight

26 lb (12 kg)