

# MODEL 9700-SCB CAMAC Products

## HIGH POWERED CAMAC CRATE (1000 / 1200 WATTS)

### Main Features:

- 1000 Watts total standard output power, 1200 Watt optional.
- All voltages, both mandatory and optional (+/-6,+/-12,+/-24)
- Modular power supply with handles, locks automatically into position making insertion and removal safe and easy. No tools required.
- Digital LCD voltage and current metering.
- Blower air-intake filters can be removed in seconds. No tools required.
- Thermal, short circuit and over-voltage protection.
- Ferro-Resonant transformer is utilized to achieve better regulation and stability.
- Ripple & noise: <10mV p-p, <1mV RMS 200kHz bandwidth.
- Access to Voltage Test points on Blower (front) and Power Supply (rear).



### General Description:

Bi Ra Model 9700-SCB is a High powered CAMAC crate which design was based on the Model 6700-SCB. This model was designed to meet the user's increasing power requirements by providing several different model types of linear power supplies. The blower unit and power supplies are modular allowing for easy upgrading or maintenance of system. The standard Model 9700 is made up of three components: the crate, the 1000 Watt power supply, and the six fan blower.

### Crate Description:

The crate incorporates the CAMAC dataway with an 86-contact PC edge connector soldered at each station. The crate supports the rear mounted power supply module and houses the removable blower unit. The crate assembly is constructed of reinforced steel and designed for convenience and serviceability. Both the blower unit and power supply can be detached without removing the crate from the rack. One piece card guide racks are Electroless nickel-plated to insure smooth alignment and minimize air obstruction for cooling of the modules. The rugged solid racks sink heat from modules to increase reliability and also provide excellent ground for low level analog applications.

### Power Supply Description:

The Model 9700 Power Supply employs the Ferro-Resonant transformer and Darlington transistors to achieve higher efficiency and reliability. The power supply is modular in construction, single connector attachment, and automatically latches into position. The power supply is self-ventilated by a large internal blower (rated at 236 CFM) to maximize cooling area and air flow in order to enhance performance and reliability. The power supply outputs are protected from over-voltage and over-current. Additional features include handles for maneuverability and safety, also instant visibility and easy access to all fuses.

### Blower Description:

The front-removable six fan blower unit features low-vibration, low-noise, and venturi-type ball-bearing fans to provide good air flow and maximum module ventilation. The blower unit and crate side panels were concurrently designed to insure maximum air-intake. This design allows the user the versatility to use the powered crate as a bench top or rack mounting it. The three large air intake ports house the dust filters which can be removed in seconds without any tools. Front panel indicators include over-temperature warning, a switch-selected digital meter for monitoring all voltages and currents, and voltage test points.

### Independent Rack Mounted Supply:

The modular power supply design allows the end-user the flexibility to rack mount the supply independently from the crate for shallow or non-rear accessible racks. This requires two simple components: the Power Supply Mounting Tray and the power cable. The tray mounts to a standard 19" rack and is designed to allow the user to mount and remove the power supply easily. The crate to power supply cable is 4ft. long or can be customized per user's requirements.

### MODEL 9700-SCB Specifications:

Dimensions: 19" rackmount, 12.25" height, 25.00" depth.

Voltage Meter: Digital meter provides monitoring of all output



currents and voltages.

Cooling: Six high capacity DC fans rated at 600 CFM @ 0" static pressure.

Total Weight: 97 lb. (44 kg.)

#### Power Specifications:

Total Power: 1000 Watts maximum +/-6V,+/12V, +/-24V combined. Standard High power unit.  
1200 Watts maximum +/-6V,+/12V, +/-24V combined. Ultra High power unit.

#### Maximum output currents from different Power supply models:

MODEL	+6V	-6V	Shared	+12V	-12V	Shared	+24V	-24V	Shared	Max.Power	Notes
9700PS	65A	65A	120A	4A	4A	8A	10A	10A	20A	1000Watt	1,2,6
9750PS	65A	65A	120A	4A	4A	8A	10A	10A	20A	1000Watt	1,3,6
9700HPS	65A	65A	120A	4A	4A	8A	10A	10A	20A	1200Watt	1,4,6
9750HPS	65A	65A	120A	4A	4A	8A	10A	10A	20A	1200Watt	1,5,6

### The 6750-SCB and 9750-SCB operate at 50Hz with input voltage of 230V

#### Notes:

1. On all models the +/-12V are derived from the +/- 24V sources; therefore the +12 V Load must be considered part of the +24V load and the -12V considered part of the -24V load.  
(All models provide current foldback limiting and overvoltage crowbar for all output voltages.)
2. AC Input: 120VAC 60Hz. AC input line current @ 20A min.
3. AC Input: 230VAC 50Hz. AC input line current @ 10A min.
4. AC Input: 120VAC 60Hz. AC input line current @ 25A min.
5. AC Input: 230VAC 50Hz. AC input line current @ 13A min.
6. 19" Rack Mount Modular Power Supply for independent mounting from crate. Order prefix (RM)

#### Electrical Specifications:

AC Input: 105-130VAC, 60Hz  
210-254VAC, 50Hz (Optional)

AC Overcurrent: Fuse protected in both line and neutral conductors.

AC Fuse rating: 105-130 VAC 20A/25A Slowblow  
210-254 VAC 10A/13A Slowblow

Efficiency: 40% minimum

Adjustability: All outputs user adjustable +/-7% minimum.

Line and Load Regulation: Better than 0.1% over AC input range and 0 to 100% Load change.

Ripple and Noise: <10 mV p-p, <1mV RMS 200 kHz bandwidth.

Overload Protection: All outputs are protected against overload and short circuit.

Overvoltage Protection: Overvoltage protection circuit crowbars output when trip lever is exceeded.

Power Supply Cooling: Self cooled with internal EBM AC ball bearing fan.

Thermal Protection: Shuts down power supply if overheated. Automatic recovery.

Thermal Warning: Heatsink temperature within 10°C of thermal shutdown.

Operating Temp. Range: Continuous operation from 0° to 40°C.

Remote Sensing: All outputs are remotely sensed at the Crate backplane.

Voltage test points: All outputs, front and rear locations.

Voltage display monitor: All voltages and currents.