

- Adds +6 V or -6 V to existing NIM bin
- 6-A output
- Adjustable from 5 to 6 volts
- Over-voltage crowbar protection
- Foldback current limiting



The ORTEC Model 495 Power Supply is a single-width NIM module that adds 6 V to existing NIM-bin/power supply combinations. The Model 495 takes power from the 117 V ac bus on the bin and energizes either the +6 V or -6 V bus, depending on the internal polarity selection. Front-panel LEDs indicate which output polarity is active. The Model 495 is factory shipped in the +6 V output condition. In the event the Model 495 is inserted into a bin that already has ± 6 V outputs, no damage will occur to any instrument. The Model 495 will indicate the presence of both outputs on the front panel.

Designed for reliable service life, the Model 495 uses only high-quality components. State-of-the-art switching conversion circuits give the Model 495 high efficiency and cool operating temperatures, and the input and output circuits are filtered for very low noise.

Protection circuits include an input line fuse and filter, an output over-voltage crowbar, and foldback current limiting. Polarity selection is accomplished by printed wiring board (PWB) jumpers without the need for special keys or tools.

Specifications

PERFORMANCE

INPUT 103–130 V ac, 47–63 Hz, 0.95 A maximum input current for 6-A output current. (NOTE: Maximum input current may exceed the capacity of some NIM bin power supplies, necessitating operation at reduced output current.)

OUTPUTS +6 V or -6 V (adjustable from 5 to 6 V) at 0–6 A (polarity PWB selectable).

REGULATION AND INSTABILITY $\leq \pm 0.1\%$ for specified line and load ranges.

OPERATING TEMPERATURE RANGE 0 to +60°C.

TEMPERATURE COEFFICIENT ± 200 ppm/°C maximum.

NOISE AND RIPPLE <30 mV peak-to-peak at 20-MHz bandwidth.

OUTPUT IMPEDANCE $< 0.12 \Omega$ for $f < 100$ kHz.

RECOVERY TIME <2 ms to within $\pm 1\%$ after full-load to no-load, or vice versa.

TURN-ON, TURN-OFF TRANSIENTS <5% of nominal output.

PROTECTION

Over-Voltage Accomplished with latching crowbar set to $6.8 \text{ V} \pm 0.5 \text{ V}$.

Short-Circuit and Overload Accomplished with automatic recovery after fault removal. Also included are Fused Input and Input Line Filter protection.

MECHANICAL

WEIGHT

Net 1.2 kg (2.7 lb).

Shipping 2.7 kg (6.1 lb).

DIMENSIONS NIM-standard single-width module 3.43 X 22.13 cm (1.35 X 8.714 in.) per DOE/ER-0457T.

Ordering Information

To order, specify:

Model	Description
495	Power Supply

Specifications subject to change
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