

POWER SUPPLIES

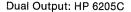
Laboratory: Single & Multiple Output, 10W to 38W (cont'd)

Models 6200B-6218C and 6234A-6237B

- Dual output to 24 watts
- Short-circuit proof
- independent voltage controls

- Triple output to 38 watts
- Short circuit proof
- Tracking ±20 volt outputs







Triple Output: HP 6235A



Triple Output: HP 6236B, 6237B

polarity voltages ($\pm 20~V,\,\pm 40~V$) can conveniently be obtained from this one supply.

This constant voltage/current limiting supply is short-circuit protected by a fixed current limiting circuit which is activated at approximately 110% of rated load current. The current-limit point can be reduced by changing the value of a single internal resistor. Units may be bench operated or rack mounted individually or in pairs using accessory rack mounting hardware.

Description—Triple Output Models

HP 6235A

This compact, low-cost, three-in-one power supply is a handy addition to the lab bench where single or multiple voltages are needed for designing and testing breadboards and prototypes. The HP 6235A delivers three adjustable dc output voltages: 0 to +6 V at 1 A, 0 to +18 V at 0.2 A, and 0 to -18 V at 0.2 A. A single 0 to 36 volt output at 0.2 A can also be obtained by connecting across the +18 V and -18 V terminals.

The controls, meter, and binding posts are conveniently arranged on the front panel. One voltage control simultaneously adjusts the $\pm 18~V$ and $\pm 18~V$ outputs, which track one another and can be used to power operational amplifiers and other circuits requiring balanced positive and negative voltages. The supply's dual outputs have added versatility with an adjustable tracking ratio control (TRACK) that can set the negative output to a lower voltage than the positive output. Once the tracking ratio control has established a voltage ratio between the positive and negative outputs, the ratio remains constant as the $\pm 18~V$ voltage control is adjusted. A third control sets the 0 to $\pm 6~V$ output voltage.

The supply is a constant voltage/current limit type with each output voltage continuously adjustable over its range, while the maximum current available is automatically limited to prevent over loading. The power supply's outputs share a common terminal and are isolated from chassis ground so that any output terminal can be grounded if desired. Each output voltage or current can be quickly selected and monitored with the push-button meter switches.

Model 6235A measures 89 H \dot{x} 157 W x 210 mm D (3.5" x 6.17" x 8.25") and weighs 2.3 kg (5 lb).

HP 6236B and 6237B

Microprocessors, digital and linear integrated circuits, and displa used in lab development frequently require triple output power su plies for operating prototypes. The HP 6236B and 6237B are valuadditions to the design bench due to their multiple output voltage small size, ease of operation and application-related performance.

These compact constant voltage/current limiting supplies combined to \pm 20 V tracking outputs rated at 0.5 A with a single output rate at 0 to +6 volts at up to 2.5 A in the HP 6236B, and 0 to +18 volts at A in the HP 6237B.

Controls, meters, and binding posts are logically arranged on neatly laid out front panel. One voltage control simultaneously a justs the 20 V and -20 V outputs, which track within 1% to pow operational amplifiers and circuits requiring balanced voltages. tracking ratio control can disable the 1:1 tracking feature and set the negative output to a lower voltage than that of the positive output once the tracking ratio control has established a voltage ratio between the positive and negative outputs, the ratio remains constant the ± 20 V voltage control varies both outputs. Another voltage cotrol sets the 0 to +6 V (HP 6236B) or 0 to +18 V (HP 6237B) outputs.

All outputs are protected against overload and short-circuit dar age by fixed current limiting circuits. For any overload condition, tl +20 V and -20 V outputs in both models are limited to 0.55 A at the +18 V output in the HP 6237B is limited to 1.1 A. The overlos protection circuit for the +6 V output in the HP 6236B has a curre foldback characteristic that reduces the maximum available curre from about 2.75 A at a 6 V terminal voltage to 1 A at zero volts (short circuited). This foldback limiting characteristic maximizes the available current in the important 5 to 6-volt range while minimizing dissipation during overloads.

Another protective feature safeguards sensitive load circuitry t preventing an output voltage overshoot when the supply is turned c or off.

Separate dual-range panel meters allow both the voltage and current of any output to be monitored simultaneously. A three-positic switch selects the output which the meters will monitor.

Both models measure only 89 H x 216 W x 319 mm D $(3.5'' \times 8.5'' \times 12.5'')$ and weigh 4.3 kg (9.5 lb).