

**Supplemental Characteristics (continued)**

**Safety agency compliance:** Designed to comply with IEC 348 and VDE 0411, CSA 556B, ANSI C39.5 Part 0, Draft 8.

**Size:** HP 6033A and 6038A: 177.0 mm H x 212.3 mm W x 443.6 mm D (6.97 in x 8.36 in x 17.872 in) HP 6030A, 6031A, 6032A, and 6035A: 132.6 mm H x 425.5 mm W x 503.7mm D (5.2 in x 16.75 in x 19.83 in)

**Warranty period:** Three years

**Key Features**

- HP-IB programming of voltage and current
- Measured voltage and current readback over the HP-IB
- SCPI (Standard Commands for Programmable Instruments)\*
- Serial link connects up to 16 outputs to one HP-IB address\*
- Auto-parallel up to 2 units
- Outputs can be connected in series
- Overtemperature protection
- Discrete Fault Indicator/Remote Inhibit (DFI/RI)\*
- Selftest at power-on or from an HP-IB command
- 16 store/recall states
- Digital I/O controls external relay accessories\*

\* For more information on these features, see page 525.

**Autorangeing Output**

As autorangeing power supplies, these models can provide a wide and continuous range of voltage and current combinations at the maximum rated power. This often allows both present and future requirements to be satisfied with fewer supplies, also reducing the number of instruments in the system.

**Optional Blank Front Panel**

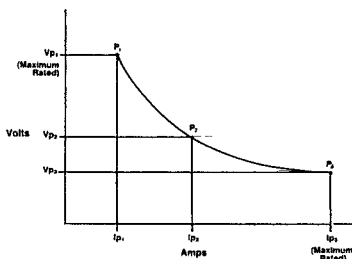
Often, control and monitoring via the front panel is very useful during system development, but is not needed afterwards. If the system is reproduced without further development, power supplies without front-panel controls and meters (Option 001) can be used (except with the HP 6035A). Ordering your power supplies with Option 001 significantly decreases the cost.

**Overvoltage and Overcurrent Protection**

Because of the delicate nature of most loads, these system power supplies provide several different types of protection. Since they are CV/CC supplies, both the output voltage and the current will be automatically limited to the programmed values. If reaching programmed value indicates an undesirable condition, the power supply can be instructed to automatically downprogram to zero output. For example, if the programmed current limit is reached while testing a PC board assembly, it may indicate a shorted component. In this case, the FOLDBACK feature, if enabled, would be able to serve as an overcurrent protection circuit and downprogram the power supply automatically. FOLDBACK can be enabled and reset over the HP-IB. The built-in overvoltage protection circuit is adjustable with a front-panel control. The set trip level can be displayed on the front-panel meter and can also be read back over the HP-IB, thus making it easy to adjust the level. The OVP circuit, once tripped, can be reset over the HP-IB.

Production procedures sometimes require the operator to adjust the output voltage or current of a power supply locally with the front-panel controls. If this is done, programmed levels can be set to limit the available adjustment range to a safe margin.

Potentially harmful conditions, such as overtemperature and high or low ac input, will trigger the power supply to automatically downprogram to zero output. When these conditions occur, or the FOLDBACK or OVP circuits trip, LEDs on the front panel light to indicate the failure. This status can also be read back to the computer over the HP-IB and can be used to generate interrupts.



Generalized autorangeing output characteristic curve

**Ordering Information**

HP Model	Output ratings	Price
HP 6030A	200 volts, 17 amperes, 1000 watts	\$3,850
HP 6031A	20 volts, 120 amperes, 1000 watts	\$3,850
HP 6032A	60 volts, 50 amperes, 1000 watts	\$3,850
HP 6033A	20 volts, 30 amperes, 200 watts	\$2,750
HP 6035A	500 volts, 5 amperes, 1000 watts	\$4,100
HP 6038A	60 volts, 10 amperes, 200 watts	\$2,750

**Option Descriptions:**

**Opt 001** Front panel which has only line switch, line indicator, and OVP adjust - \$300

Standard unit is configured to operate at 104 to 127 Vac, 48 to 63 Hz. To operate at other input voltages, order one of the following line voltage options.

- Opt 100** 87-106 Vac, 48-63 Hz. This option is for use in Japan only. The power supply output power is 75% of the output power available with the other line voltage options. \$0
- Opt 220** 191-233 Vac, 48-63 Hz. \$0
- Opt 240** 208-250 Vac, 48-63 Hz. \$0

For HP models 6030A, 6031A, 6032A, and 6035A, one of the following line cord options must be specified when ordering. Order according to local electrical codes. All line cords are 2.5 meters long.

- Opt 831** 12 AWG wire size; UL listed, CSA certified; unterminated line cord (200-240 Vac connections) \$0
- Opt 833** 1.5 mm<sup>2</sup> wire size; Harmonized cordage; unterminated line cord (200-240 Vac connections) \$0
- Opt 834** 10 AWG wire size; UL listed, CSA certified; unterminated line cord (100-120 Vac connections) \$0
- Opt 841** Line cord with NEMA 6-20P, 20A/250V plug (suggested for use in North and South America) \$15
- Opt 843** Line cord with JIS C8303 appended fig 6(2), 20A/250V plug (suggested for use in Japan) \$35
- Opt 845** Line cord with IEC 309, 16A/220V plug (suggested for use in Denmark, Switzerland, Austria, China and other countries not listed) \$35
- Opt 846** Line cord with NEMA L5-30P, 30A/120V locking plug (suggested for use in North America) \$55
- Opt 847** Line cord with CEE 7/7, 16A/220V plug (suggested for use in continental Europe) \$35
- Opt 848** Line cord with BS 546, 15A/240V plug (suggested for use in India and South Africa) \$35

- Opt 800** Rack mount kit for two units side by side. This applies to HP 6033A and 6038A only. \$79
- Opt 908** Rack mount kit for a single unit. A blank filler panel is supplied when this option is ordered with HP 6033A and 6038A.
  - HP 6033A and 6038A \$84
  - HP 6030A, 6031A, 6032A and 6035A \$35
- Opt 909** Rack mount kit with handles for HP Models 6030A, 6031A, 6032A, 6035A \$85
- Opt 910** One extra operating and service manual shipped with each power supply. \$32

**Accessory**

HP 5080-2148 serial link cable, 2m (6.6') \$6

Up to 16 power supplies can share one HP-IB address, while still providing full independent control. This feature requires programming in SCPI mode. To use this feature you will need to order one HP 5080-2148 serial link cable for each unit to be added to the chain, with the first unit connected directly to HP-IB.