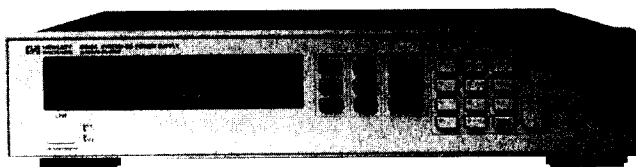


# POWER SUPPLIES

## Single-Output System, 100 W

HP 6632A, 6633A, 6634A

- Linear output regulation
- Low ripple and noise
- "One-Box" solution: includes V and I readback
- Fast up- and down-programming






### Specifications (at 0° to 55° C unless otherwise specified)

			HP 6632A	HP 6633A	HP 6634A
Output ratings	Output voltage		0 to 20 V	0 to 50 V	0 to 100 V
	Output current		0 to 5 A	0 to 2 A	0 to 1 A
Programming accuracy at 25° C ± 5° C	Voltage		0.05% + 10 mV	0.06% + 20 mV	0.05% + 50 mV
	+ Current		0.15% + 7 mA	0.15% + 2 mA	0.15% + 1 mA
Ripple and noise from 20 Hz to 20 MHz	Voltage (rms/peak-peak)	Normal mode	0.3 mV/3 mV	0.5 mV/3 mV	0.5 mV/3 mV
		Fast mode	1 mV/10 mV	1 mV/15 mV	2 mV/25 mV
	Current	rms	2 mA	2 mA	2 mA
Readback accuracy (at 25° C ± 5° C) (percent of reading plus fixed)	Voltage		0.07% + 15 mV	0.07% + 30 mV	0.06% + 70 mV
	+ Current		0.18% + 9 mA	0.17% + 3 mA	0.15% + 2 mA
	- Current		0.50% + 15 mA	0.50% + 7 mA	0.50% + 6 mA
Load regulation	Voltage		2 mV	4 mV	5 mV
	Current		1 mA	1 mA	1 mA
Line regulation	Voltage		0.5 mV	1 mV	1 mV
	Current		0.5 mA	0.25 mA	0.25 mA

**Transient Response Time:** Less than 100  $\mu$ s (50  $\mu$ s in fast mode) for the output voltage to recover to its previous level (within 0.1% of the

voltage rating of the supply) following any step change in load current of up to 50% of rated current.

### Supplemental Characteristics (Nonwarranted characteristics determined by design and useful in applying the products)

		HP 6632A	HP 6633A	HP 6634A
Programming resolution	Voltage	5 mV	12.5 mV	25 mV
	Current	1.25 mA	0.5 mA	0.25 mA
	OVP	100 mV	250 mV	500 mV
OVP accuracy		2.4%+240 mV	2.4%+600 mV	2.4%+1.2 V
Sink current		5 A	2 A	1 A
Minimum current in constant current mode		20 mA	8 mA	4 mA
				

See inside back cover.

**DC Floating Voltage:** Output terminals can be floated up to  $\pm 240$  Vdc from chassis ground.

**Remote Sensing:** Up to 2 volts can be dropped in each load lead. Add 5 mV to the voltage load regulation specification for each 1-V change in the negative output lead due to load current change.

**Command Processing Time:** Average time required for the output voltage to begin to change following receipt of digital data is 10 ms for power supplies connected directly to the HP-IB.

**Output Programming Response Time:** The rise and fall time (10/90% and 90/10%) of the output voltage is less than 15 ms (400  $\mu$ s in fast mode). The output voltage change settles within 1 LSB (0.025%  $\times$  rated voltage) of final value in less than 60 ms (2 ms in fast mode).

**Input Power:** 350 VA, 250 W at full load

**HP-IB Interface Capabilities:** SH1, AH1, T6, L4, SR1, RL1, PP1, DC1, DT0, E1 and C0

**Regulatory Compliance:** Listed to UL 1244; certified to CSA 556B; conforms to IEC 348; carries the CE mark.

**RFI Suppression:** Complies with CISPR-11 Group 1 Class B

**Size:** 88.1 mm H  $\times$  425.5 mm W  $\times$  346 mm D (3.5 in  $\times$  16.75 in  $\times$  13.6 in)

**Weight:** Net, 10.5 kg (23 lb); shipping, 12.3 kg (27 lb)

**Warranty Period:** Three years

### Key Features (for more information, see page 150)

- HP-IB programming of voltage and current
- Measured voltage and current readback over the HP-IB
- Programmable overvoltage and overcurrent protection
- Self-test occurs at power-on or from an HP-IB command
- Electronic calibration via HP-IB
- Option 760 for built-in relays and DF1/RI
- Fast or normal mode operation selected via rear-panel switch
- Option 020 provides front panel binding posts

### Key Literature

1995/96 Power Products Catalog, p/n 5963-3906.

### Ordering Information

#### Option Descriptions

**Standard:** 104 to 127 Vac, 48 to 63 Hz, 3.3 A

**Opt 020** Front Binding Posts

**Opt 760** Isolation and Reversal Relays; includes discrete fault indicator and remote inhibit

**Opt 100** 87 to 106 Vac, 48 to 63 Hz, 2.9 A (Japan only)

**Opt 220** 191 to 233 Vac, 48 to 63 Hz, 1.7 A

**Opt 240** 209 to 250 Vac, 48 to 63 Hz, 1.6 A

**Opt 908** Rack Mount Kit (HP p/n 5061-9674)

**Opt 909** Rack Mount Kit with handles (HP p/n 5061-9675)

**Opt 910** Extra Operating Manual (HP p/n 5957-6360) and Service Manual (HP p/n 5957-6365). Standard unit is shipped with operating manual only.

**Accessory rack slide kit** (HP p/n 1494-0060)