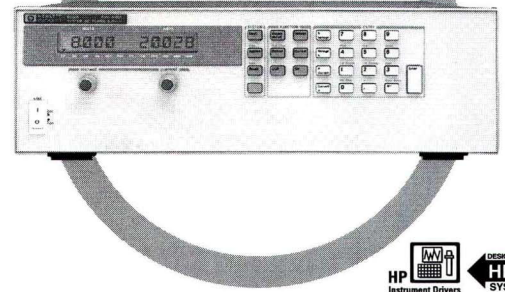


Single-Output System and Manually Controlled - 500 W

- Complete front-panel control, calibration and display
- Remote programming and sensing
- Fan-speed control to minimize acoustic noise
- Low ripple and noise
- Over-voltage and over-current protection
- Linear output regulation
- Fast up-and down-programming
- SCPI (Standard Commands for Programmable Instruments)



SPECIFICATIONS

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

System Power Supplies (HP-IB)		HP 6651A	HP 6652A	HP 6653A	HP 6654A	HP 6655A
General Purpose Power Supplies (w/o HP-IB)		HP 6551A	HP 6552A	HP 6553A	HP 6554A	HP 6555A
Output ratings	Output voltage	0 to 8 V	0 to 20 V	0 to 35 V	0 to 60 V	0 to 120 V
	Output current (40° C)	0 to 50 A	0 to 25 A	0 to 15 A	0 to 9 A	0 to 4 A
	Maximum current (50° C/55° C)	45 A/42.5 A	22.5 A/21.3 A	13.5 A/12.8 A	8.1 A/7.7 A	3.6 A/3.4 A
Programming accuracy at 25° C ±5° C	Voltage	0.06% +	5 mV	10 mV	15 mV	26 mV
	Current	0.15% +	60 mA	25 mA	13 mA	8 mA
Ripple and noise from 20 Hz to 20 MHz	Voltage rms	300 µV	300 µV	400 µV	500 µV	700 µV
	peak-peak	3 mV	3 mV	4 mV	5 mV	7 mV
	Current rms	25 mA	10 mA	5 mA	3 mA	2 mA
Readback accuracy at 25° C ±5° C (percent of reading plus fixed) System models only	Voltage	0.07% +	6 mV	15 mV	25 mV	40 mV
	+Current	0.15% +	67 mA	26 mA	15 mA	7 mA
	-Current	0.35% +	100 mA	44 mA	24 mA	15 mA
Load regulation	Voltage	1 mV	2 mV	3 mV	4 mV	5 mV
	Current	2 mA	1 mA	0.5 mA	0.5 mA	0.5 mA
Line regulation	Voltage	0.5 mV	0.5 mV	1 mV	1 mV	2 mV
	Current	2 mA	1 mA	0.75 mA	0.5 mA	0.5 mA
Transient response time	Less than 100 µs for the output voltage to recover to its previous level (within 0.1% of the voltage rating of the supply or 20 mV, whichever is greater) following any step change in load current of up to 50% of rated current					
Supplemental Characteristics		(Non-warranted characteristics determined by design and useful in applying the product)				
Average resolution	Voltage	2 mV	5 mV	10 mV	15 mV	30 mV
	Current	15 mA	7 mA	4 mA	2.5 mA	1.25 mA
	OVP	12 mV	30 mV	54 mV	93 mV	190 mV
OVP accuracy		160 mV	400 mV	700 mV	1.2 V	2.4 V

dc Floating Voltage: Output terminals can be floated up to ±240 Vdc from chassis ground

Remote Sensing: Up to half the rated output voltage can be dropped in each load lead. The drop in the load leads subtracts from the voltage available for the load.

Command Processing Time: (HP 6651A, 6652A, 6653A, 6654A, 6655A only): Average time required for the output voltage to begin to change following receipt of digital data is 20 ms for the 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. The output voltage change settles within 1 LSB (0.025% x rated voltage) of final value in less than 60 ms.

Down Programming: An active down programmer sinks approximately 20% of the rated output current

Modulation: (Analog programming of output voltage and current)

Input signal: 0 to -5 V

Input impedance: 10 k Ohm nominal

ac Input: (ac input frequency 47 to 63 Hz)

Voltage	100 Vac	120 Vac	220 Vac	240 Vac
Current	12 A	10 A	5.7 A	5.3 A

Input Power: 1,380 VA, 1,100 W at full load; 120 W at no load

HP-IB Interface Capabilities: (HP 6651A, 6652A, 6653A, 6654A, 6655A only): SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, E1, and C0. IEEE-488.2 and SCPI-compatible command set.

Regulatory Compliance: Listed to UL-1244; certified to CSA556B; conforms to IEC348; carries the CE mark

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

Size: 425.5 mm W x 132.6 mm H x 497.8 mm D (16.75 in x 5.22 in x 19.6 in) See page 43 for more details

Weight: Net, 25 kg (54 lb); shipping, 28 kg (61 lb)

Warranty Period: Three years

Ordering Information

STANDARD 104 to 127 Vac, 47 to 63 Hz

Opt 100 87 to 106 Vac, 47 to 63 Hz

Opt 220 191 to 233 Vac, 47 to 63 Hz

Opt 240 209 to 250 Vac, 47 to 63 Hz

Opt 908 Rack-mount Kit

(HP p/n 5062-3977)

Opt 909 Rack-mount Kit

w/ Handles (HP p/n 5062-3983)

Opt 910 Service Manual, extra Operating Guide and Programming Guide

ACCESSORIES

HP p/n 1494-0059 Accessory Slide Kit

The following accessories for HP 6651A, 6652A, 6653A, 6654A and 6655A only:

HP p/n 1252-3698 7-pin Analog Plug

HP p/n 1252-1488 4-pin Digital Plug

HP p/n 5080-2148 Serial Link

Cable 2 m (6.6 ft)