

Specifications (continued)

Hewlett-Packard Model	HP 6060B, 60502B	HP 6063B, 60503B	HP 60501B	HP 60504B	HP 60507B
Analog programming bandwidth	10 kHz (-3 dB frequency)	10 kHz (-3 dB frequency)	10 kHz (-3 dB frequency)	10 kHz (-3 dB frequency)	10 kHz (-3 dB frequency)
Analog programming accuracy					
Current (low range)	4.5% ± 75 mA	3% ± 8 mA	4.5% ± 40 mA	4% ± 200 mA	4% ± 75 mA
Current (high range)	4.5% ± 250 mA	3% ± 12 mA	4.5% ± 130 mA	4% ± 400 mA	4% ± 200 mA
Temperature coefficient	100 ppm/°C ± 6 mA/°C	150 ppm/°C ± 1 mA/°C	100 ppm/°C ± 3 mA/°C	100 ppm/°C ± 12 mA/°C	150 ppm/°C ± 6 mA/°C
Voltage	0.8% ± 200 mV	0.5% ± 150 mV	0.8% ± 200 mV	0.8% ± 200 mV	0.8% ± 375 mV
Temperature coefficient	100 ppm/°C ± 1 mV/°C	120 ppm/°C ± 10 mV/°C	100 ppm/°C ± 1 mV/°C	100 ppm/°C ± 1 mV/°C	120 ppm/°C ± 12.5 mV/°C
Analog programming voltage	0 to 10 V	0 to 10 V	0 to 10 V	0 to 10 V	0 to 10 V
Readback specifications					
Current readback resolution	17 mA (via HP-IB) 20 mA (front panel)	2.7 mA (via HP-IB) 10 mA (front panel)	9 mA (via HP-IB) 10 mA (front panel)	32 mA (via HP-IB) 100 mA (front panel)	17 mA (via HP-IB) 20 mA (front panel)
Current readback accuracy	0.05% ± 65 mA	0.12% ± 10 mA	0.06% ± 40 mA	0.1% ± 110 mA	0.1% ± 65 mA
Temperature coefficient	50 ppm/°C ± 5 mA/°C	100 ppm/°C ± 1 mA/°C	65 ppm/°C ± 3 mA/°C	100 ppm/°C ± 8 mA/°C	100 ppm/°C ± 5 mA/°C
Voltage readback resolution	17 mV (via HP-IB) 20 mV (front panel)	67 mV (via HP-IB) 100 mV (front panel)	17 mV (via HP-IB) 20 mV (front panel)	16 mV (via HP-IB) 20 mV (front panel)	40 mV (via HP-IB) 100 mV (front panel)
Voltage readback accuracy	0.05% ± 45 mV	0.1% ± 150 mV	0.05% ± 45 mV	0.1% ± 45 mV	0.1% ± 90 mV
Temperature coefficient	50 ppm/°C ± 1.2 mV/°C	100 ppm/°C ± 8 mV/°C	50 ppm/°C ± 1.2 mV/°C	100 ppm/°C ± 2 mV/°C	100 ppm/°C ± 5 mV/°C
Power readback accuracy	0.2% ± 4 W	0.2% ± 3 mV	0.2% ± 2 W	0.2% ± 8 W	0.2% ± 8 W
Analog monitor accuracy					
Current monitor (0 to 10 V out)	4% ± 85 mA	3% ± 10 mA	4% ± 40 mA	4% ± 170 mA	3% ± 85 mA
Temperature coefficient	50 ppm/°C ± 6 mA/°C	100 ppm/°C ± 1 mA/°C	60 ppm/°C ± 3 mA/°C	100 ppm/°C ± 10 mA/°C	100 ppm/°C ± 6 mA/°C
Voltage monitor (0 to 10 V out)	0.25% ± 40 mV	0.4% ± 240 mV	0.25% ± 40 mV	0.4% ± 60 mV	0.4% ± 120 mV
Temperature coefficient	50 ppm/°C ± 0.2 mV/°C	70 ppm/°C ± 1.2 mV/°C	50 ppm/°C ± 0.2 mV/°C	100 ppm/°C ± 2 mV/°C	100 ppm/°C ± 5 mV/°C
Remote sensing	5 Vdc maximum between sense and load input				
Minimum operating voltage	2 volts (typical 1.2 V)	2 volts (typical 1.2 V)	2 volts (typical 1.2 V)	2 volts (typical 1.4 V)	2 volts (typical 1.4 V)
Programmable short	0.033 Ω (0.020 typical)	0.20 Ω (0.10 typical)	0.066 Ω (0.040 typical)	0.017 Ω (0.012 typical)	0.033 Ω (0.025 Ω typical)
Programmable open (typical)	20 KΩ (typical)	80 KΩ (typical)	20 KΩ (typical)	20 KΩ (typical)	20 KΩ (typical)
Drift (over 8-hour interval)					
Current	0.03% ± 10 mA	0.03% ± 15 mA	0.03% ± 5 mA	0.03% ± 20 mA	0.03% ± 10 mA
Voltage	0.01% ± 10 mV	0.01% ± 20 mV	0.01% ± 10 mV	0.01% ± 10 mV	0.01% ± 25 mV
PARD (20 Hz to 10 MHz noise)					
Current	4 mA rms 40 mA peak-peak	1 mA rms 10 mA peak-peak	2 mA rms 20 mA peak-peak	6 mA rms 60 mA peak-peak	4 mA rms 40 mA peak-peak
Voltage	6 mV rms	6 mV rms	5 mV rms	8 mV rms	10 mV rms
dc solution voltage	± 240 Vdc, between any input and chassis ground				
Digital inputs	V _L = 0.9 V max at I _L = -1 mA V _H = 3.15 V min (pull-up resistor on input)				
Digital outputs	V _{OL} = 0.72 V max at I _{OL} = 1 mA V _{OH} = 4.4 V min at I _{OH} = -20 ΩA				
Net weight (approx.)	6060A: 6.4 kg (14 lb) 60502A: 3.2 kg (7 lb)	6063A: 6.4 kg (14 lb) 60503A: 3.2 kg (7 lb)	3.2 kg (7 lb)	5.9 kg (13 lb)	5.9 kg (13 lb)
Shipping weight	6060A: 7.5 kg (17 lb) 60502A: 4.5 kg (10 lb)	6063A: 7.5 kg (17 lb) 60503A: 4.5 kg (10 lb)	4.5 kg (10 lb)	7.3 kg (16 lb)	7.3 kg (16 lb)

- Notes:
 1. Operating temperature range is 0 to 55°C. All specifications apply for 25°C ± 5°C, except as noted.
 2. Maximum continuous power available is derated linearly from 40°C to 75% of maximum at 55°C.
 3. dc current accuracy specifications apply 30 seconds after input is applied.

Ordering Information

Model	Price	Options							
		Front Panel Inputs	ac Input			Rackmount Kit			Extra Manuals
			100 Vac Japan Only	220 Vac	240 Vac	800	908	909	
HP 6050A	\$1,920	—	\$0*	\$0*	\$0*	—	+\$37†	+\$98†	+\$52*
HP 6051A	\$1,700	—	\$0*	\$0*	\$0*	+\$67†	—	—	+\$50*
HP 6060B	\$2,100	+\$82*	\$0*	\$0*	\$0*	—	+\$32*	+\$75*	+\$35*
HP 6063B	\$2,500	+\$82*	\$0*	\$0*	\$0*	—	+\$32*	+\$75*	+\$35*
HP 60501B	\$1,315	—	—	—	—	—	—	—	+\$32*
HP 60502B	\$1,620	—	—	—	—	—	—	—	+\$32*
HP 60503B	\$1,950	—	—	—	—	—	—	—	+\$32*
HP 60504B	\$2,275	—	—	—	—	—	—	—	+\$32*
HP 60507B	\$2,500	—	—	—	—	—	—	—	+\$32*

† Options 908 and 909 for the HP 6050A, and Options 800 and 908 for the HP 6051A, require either the slide kit (P/N 1494-0059) or slide rails to support the weight of the load mainframe. Slide kits can be purchased using the above part number.

- * This feature is available as an option.
 — This feature is not available.

Option Descriptions

- Opt 020** Front panel inputs (for HP 6060B and 6063B only)
- Opt 100** 87 to 106 Vac, 47 to 66 Hz (for Japan only)
- Opt 220** 191 to 233 Vac, 47 to 66 Hz
- Opt 240** 209 to 250 Vac, 47 to 66 Hz
- Opt 800** Rackmounting kit for two units (for 6051A) mounted side by side (HP part numbers 5062-3994 and 5062-3978)
- Opt 908** Rackmounting kit includes (HP P/N 5062-3978 with an HP 6050A, HP P/N 5062-3960 with HP 6051A, and HP P/N 5062-3974 with an HP 6060B and 6063B)
- Opt 909** Rackmounting kit with handles (HP P/N 5062-3984 when mounting an HP 6050A and HP P/N 5062-3975 when mounting an HP 6060B and 6063B)
- Opt 910** Extra manual set, including one each of the operating manual, programming reference manual, and service manual. The programming manual is available with the mainframe, and therefore not individual modules (operating manuals and programming manuals only are shipped with standard units)