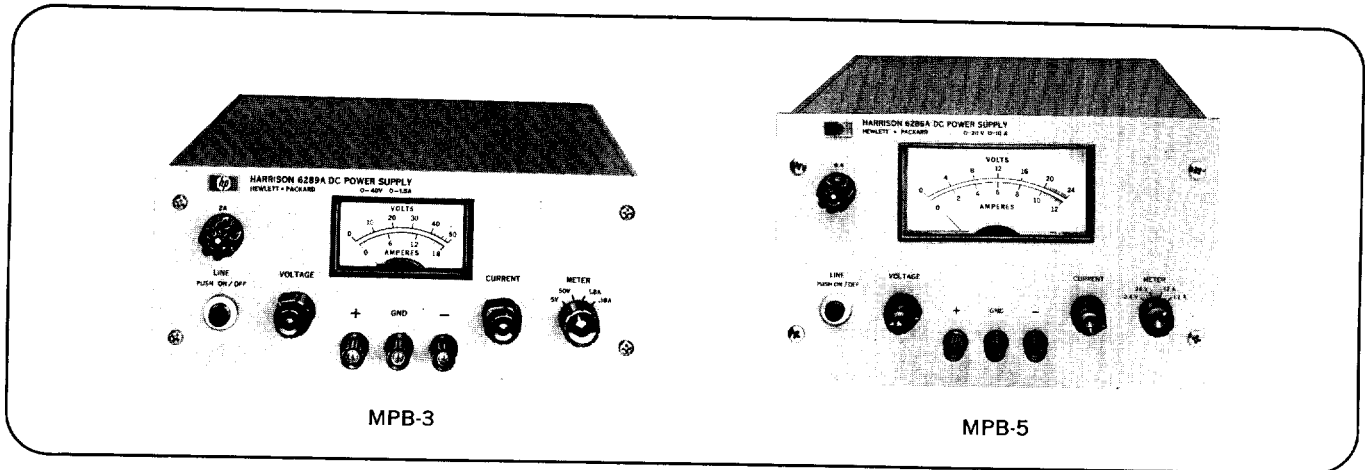


# POWER SUPPLIES



## MEDIUM & DUAL POWER SUPPLIES MPB-3, MPB-5, & DPR series Models 6281A-6299A, 6253A, 6255A



The MPB-3 and MPB-5 Series of dc power supplies are highly regulated, medium power, constant voltage/constant current bench models. All include multiple range meters and provision for remote sensing, remote programming, auto-series, auto-parallel, and auto-tracking operation.

The DPR models contain two identical MPB-3 supplies mounted in a full rack-width chassis. All DPR features and specifications are identical to the MPB-3 with the exceptions listed on the following page.

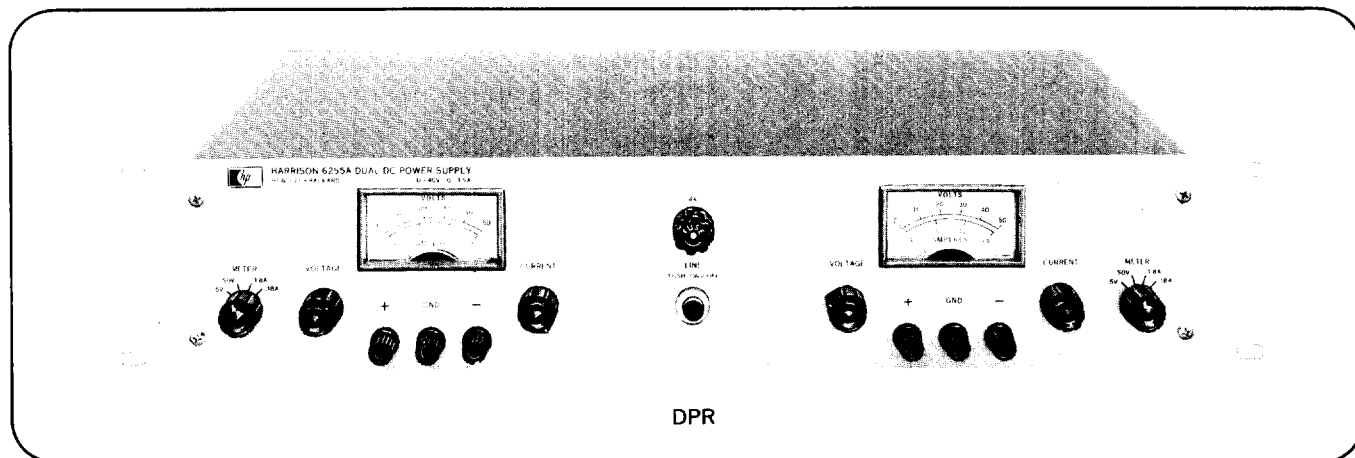
### Advantages:

- Short circuit proof
- Constant voltage/constant current operation with automatic crossover
- Multiple range meters
- Floating output
- All silicon circuitry
- Front and rear output terminals
- No overshoot on turn-on, turn-off, or power removal
- Easily rack mounted
- Overtoltage protection "crowbar" option
- Auto-series, auto-parallel, auto-tracking

### MPB-5 Specifications

Model		6282A	6285A	6286A	6290A	6291A	6296A
Output	DC Voltage	0-10V	0-20V	0-20V	0-40V	0-40V	0-60V
	DC Current	0-10A	0-5A	0-10A	0-3A	0-5A	0-3A
Input: 115 V ac ± 10%, 50-60 Hz		3.5A, 200W	3.5A, 160W	5.5A, 320W	3.5A, 170W	5.5A, 280W	4.5A, 250W
*Load regulation: The Constant Voltage Load Regulation specification is given for a load current change equal to the current rating of the supply. The Constant Current Load Regulation specification is given for a load voltage change equal to the voltage rating of the supply.	C V	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV
	C C	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA
Line regulation: For a 10% change in the nominal line voltage at any output voltage and current within rating.	C V	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV	0.01% plus 1 mV
	C C	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA	0.05% plus 1 mA
Ripple and noise: At any line voltage and under any load condition within rating.	C V	500 $\mu$ V RMS (25 mV peak to peak DC to 20 MHz)					
	C C	5 mA RMS	3 mA RMS	5 mA RMS	3 mA RMS	3 mA RMS	3 mA RMS
Remote programming: All Programming terminals are located on rear barrier strips.	C V	200 ohms per volt	200 ohms per volt	200 ohms per volt	200 ohms per volt	200 ohms per volt	300 ohms per volt
	C C	100 ohms per amp	200 ohms per amp	100 ohms per amp	500 ohms per amp	200 ohms per amp	500 ohms per amp
Meter ranges: (Accuracy : 3%)		0-1.2 V, 0-12 V, 0-1.2 A, 0-12 A	0-2.4 V, 0-24 V, 0-.6 A, 0-6 A	0-2.4 V, 0-24 V, 0-1.2 A, 0-12 A	0-5 V, 0-50 V, 0-.4 A, 0-4 A	0-5 V, 0-50 V, 0-.6 A, 0-6 A	0-7 V, 0-70 V, 0-.4 A, 0-4 A
Weight: (Net/Shipping)	lbs	25/32	25/32	30/40	26/33	30/40	29/38
	kg	11,3/14,5	11,3/14,5	13,6/14,1	11,8/15,0	13,6/14,1	13,1/12,7
Price		\$350	\$350	\$395	\$350	\$395	\$395
Options: Refer to page 561 for description		05-\$10 09-\$45 11-\$55	No charge if ordered with Option 28 13-\$60	14-\$60	07-\$25 28-\$50	08-\$25	

\*CV load regulation given for rear terminals only. At front terminals CV load regulation is 0.5 mV per amp greater due to front terminal resistance.



**Output impedance:** MPB-5 series: 0.001 $\Omega$  series with 1  $\mu$ H. For other models, see table below.

**Controls:** Concentric coarse and fine output voltage and current controls permit continuous adjustment over entire output span. Models 6294A and 6299A incorporate a 10-turn front panel voltage control in lieu of the concentric coarse and fine voltage controls. Switch selects front panel meter voltage or current scale.

**Finish:** Light gray panel with dark gray case.

**Accessories:** Rack Kits 14513A and 14523A. See page 561.

**Transient recovery time:** Less than 50  $\mu$ s is required for output voltage recovery in constant voltage operation to within 15 millivolts of the nominal output voltage following a change in output current equal to the current rating of the

supply or 5 amperes, whichever is smaller. The nominal output voltage is defined as the mean between the no load and full load voltages.

**Temperature ratings:**

Operating: 0-50°C (consult factory for derating information for operation between 50°C and 71°C)

Storage — 20°C to +85°C

**Size:**

MPB-3 — 3½" H x 8½" W x 14½" D  
— 8,9 cm H x 21,8 cm W x 36,8 cm D

MPB-5 — 5¼" H x 8½" W x 16" D  
— 13,3 cm H x 21,8 cm W x 40,7 cm D

DPR — 3½" H x 14½" D x 19" W  
— 8,9 cm H x 36,8 cm D x 48,3 cm W

Model		MPB-3 6281A	MPB-3 6284A	DPR 6253A	MPB-3 6289A	DPR 6255A	MPB-3 6294A	MPB-3 6299A	
Output	DC Voltage	0-7.5V	0-20V		0-40V		0-60V	0-100V	
	DC Current	0-5A	0-3A		0-1.5A		0-1A	0-750 mA	
Input: 115 V ac $\pm$ 10%, 50-400 Hz		1.3 A 118 W	1.5 A 128 W	3 A 256 W	1.3 A 110 W	2.6 A 220 W	1.3 A 114 W	1.5 A 135 W	
*Load regulation: The Constant Voltage Load Regulation is given for a load current change equal to the current rating of the supply. The Constant Current Load regulation is given for a load voltage change equal to the voltage rating of the supply.	C V	5 mV	0.01% plus 4 mV		0.01% plus 2 mV		0.01% plus 2 mV	0.01% plus 2 mV	
	C C	0.01% plus 250 $\mu$ A	0.01% plus 250 $\mu$ A		0.01% plus 250 $\mu$ A		0.01% plus 250 $\mu$ A	0.01% plus 250 $\mu$ A	
Line regulation: For a 10% change in the nominal line voltage at any output voltage and current within rating.	C V	0.01% plus 2 mV	0.01% plus 2 mV		0.01% plus 2 mV		0.01% plus 2 mV	0.01% plus 2 mV	
	C C	0.01% plus 250 $\mu$ A	0.01% plus 250 $\mu$ A		0.01% plus 250 $\mu$ A		0.01% plus 250 $\mu$ A	0.01% plus 250 $\mu$ A	
Ripple and noise: At any line voltage and under any load condition within rating.	C V	200 $\mu$ V RMS/1 mV p-p (dc to 20 MHz)							
	C C	4 mA RMS	2 mA RMS		500 $\mu$ A RMS		500 $\mu$ A RMS	500 $\mu$ A RMS	
Remote programming: All Programming terminals are located on rear barrier strips.	C V	200 ohms per volt	200 ohms per volt		200 ohms per volt		300 ohms per volt	300 ohms per volt	
	C C	200 ohms per amp	500 ohms per amp		500 ohms per amp		1000 ohms per amp	1000 ohms per amp	
Output impedance:		1 m $\Omega$ + 1 $\mu$ H	2m $\Omega$ + 1 $\mu$ H		4m $\Omega$ + 1 $\mu$ H		8m $\Omega$ + 1 $\mu$ H	16m $\Omega$ + 1 $\mu$ H	
Meter ranges (Accuracy: 3%)		0-9 V, 0-9 V, 0-6 A, 0-6 A	0-2.4 V, 0-24 V, 0-4 A, 0-4 A		0-5 V, 0-50 V, 0-18 A, 0-1.8 A		0-7 V, 0-70 V, 0-12 A, 0-1.2 A	0-12 V, 0-120 V, 0-1 A, 0-1 A	
Weight: (Net/Shipping)	lbs.	14/19	14/19	28/35	14/19	28/35	14/19	15/20	
	kg	6,4/8,6	6,4/8,6	12,7/15,8	6,4/8,6	12,7/15,8	6,4/8,6	6,8/9,1	
Price		\$210	\$210	\$445	\$210	\$445	\$210	\$225	
Options: Refer to page 561 for details		MPB-3 07—\$25	08—\$25	09—\$45	11—\$110	13—\$60	14—\$60	28—\$10	
		DPR 07—\$50	08—\$50	09—\$90	10—\$125	11—\$110	13—\$120	14—\$120	28—\$10

CC indicates constant current.

CV indicates constant voltage.