

Digital Linear Power Supplies

PSU300 Series



- 30 to 30 Vdc
- True Constant Voltage and Constant Current Performance
- 12-Bit D/A Converter
- 2 x 16 Dot-Matrix Backlit LCD; Voltage and Current are Displayed Simultaneously
- Software Calibration
- Sophisticated Cooling System
- RS232 Output
- Beeper-Overload Warning and Status Change Indication
- Up/Down Key for Easy Setting
- Numeric Keyboard for Direct Setting (PSU305 Only)
- Single Channel, Dual Range
- Auto-Ranging (PSU301, PSU302 Only)
- Three Channels—2 Adjustable and 1 Fixed Output: 5V or 3.3V (PSU304, PSU305 Only)

The PSU300 Series comprises power supplies with voltages from -30 to 30 Vdc, power levels from 30 to 165 W, and constant current from 0 to 3 A. Standard features include RS232 communications output, LCD, sophisticated cooling system, and software calibration.



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.



PSU304 shown smaller than actual size.



PSU305 shown smaller than actual size.

To Order (Specify Model Number)			
Model No.	Price	Voltage	Wattage
PSU301	\$470	0 to 30	30
PSU304	639	0 to 30	70
PSU305	790	-30 to 30	165

Comes complete with 1.5 m (5') power cord, fuse and operator's manual.
Ordering Examples: PSU301, 0 to 30 Vdc linear power supply.
 OCW-3, OMEGACARESM extends standard 1-year warranty to a total of 4 years.

PSU300 Series
shown smaller
than actual size.



Specifications

Model	PSU301		PSU304	PSU305
Max Output Power	30 W		70 W	165 W
Output Voltage	HIGH	LOW		
	0 to 15 V	0 to 30 V	0 to 30 V/ 0 to -30 V fixed 5 V	0 to 30 V/ 0 to -30 V fixed 3.3 V/5 V
Setting Resolution	10 mV	10 mV	10 mV	10 mV
Max Output Voltage	16 V	32 V	32/-32 V	32/-32 V
Dual Tracking	—	—	0 to ±30 V	0 to ±30 V
Tracking Deviation	—	—	±20 mV	±20 mV
Output Current	0 to 2 A	0 to 1 A	0 to 1 A/ 0 to -1 A 2 A	0 to 2.5 A/ 0 to -2.5 A 3 A
Setting Resolution	1 mA	1 mA	1 mA	1 mA
Max Output Current	2.4 A	1.2 A	1.2 A/-1.2 A CL = 2.2 A	3 A/-3 A CL = 3.3 A
Dual Tracking	—	—	0 to ±1 A	0 to ±2.5 A
Tracking Deviation	—	—	±2 mA	±5 mA
CONSTANT VOLTAGE CHARACTERISTICS (AT RATED OUTPUTS)				
Line Regulation (10% AC)	—	—	1 mV 5 mV	1 mV 5 mV
Load Regulation (100% Load Change)	—	—	2 mV 10 mV	2 mV 10 mV
Ripple/Noise rms (10 Hz to 20 mHz)	—	—	1.5 mVrms 2 mVrms	2 mVrms
Ripple/Noise Peak (10 Hz to 20 MHz)	—	—	10 mV p-p 20 mV p-p	10 mV p-p 20 mV p-p
Transient Response	—	—	200 s typical	200 s typical
Temp Coefficient	—	—	100 ppm/°C typical	
CONSTANT CURRENT CHARACTERISTICS (AT RATED OUTPUTS)				
Line Regulation (10% AC)	—	—	15 mA typical	15 mA typical
Load Regulation (100% Load Change)	—	—	10 mA typical	10 mA typical
Ripple/Noise rms (10 Hz to 20 MHz)	—	—	1 mA rms typical	1 mA rms typical
Ripple/Noise Peak (10Hz to 20MHz)	—	—	5 mA p-p typical	5 mA p-p typical
Temp Coefficient	—	—	200 ppm typical	
Display	16 character x 2 line backlit LCD; front-panel status indicator with beeper			
Voltage Accuracy*	±0.2% rdg + 2 digits			
Current Accuracy*	±0.5% rdg + 5 digits			
Common Mode Voltage	±240 Vdc			
Temp Range	Operating: 0 to 40°C (32 to 104°F), less than 80% RH; Storage: -45 to 75°C (-49 to 167°F), less than 80% RH			
Dimensions (W x H x L)	221 x 86 x 300 mm (8.7 x 3.4 x 11.8")			213 x 132 x 399 mm (8.4 x 5.2 x 15.7")
Weight	Approx. 4.5 kg (10 lb)		Approx 5.4 kg (12 lb)	Approx 8.2 kg (18 lb)
Cooling	Forced air			
RS232 Interface	Standard, port configuration: asynchronous 2400 baud, 8 data bits, 1 stop bit, no parity			
RS232C DCE Interface	9-pin D-sub connector			
Power 115 Vac ±10%	47 to 63 Hz, 1 A, approx 250 W		47 to 63 Hz, 2 A, approx 110 W	47 to 63 Hz, 2 A, approx 250 W

* For output of less than 5% of rated output, add 5 digits to the accuracy specification.