

# LPS300 SERIES

## DIGITAL LINEAR POWER SUPPLIES



### KEY FEATURES:

- True constant voltage and constant current performance
- 12 bits D/A converter accuracy
- 2x16 dot-matrix backlit LCD display, Voltage and Current are displayed simultaneously
- Software calibration
- Intelligent cooling system
- Optional RS232 output
- Beeper-overload warning and status change indication
- Up, Down key for easy setting
- Numeric keyboard for direct setting (LPS-305 only)
- Single Channel, Dual range (Aurorange) (LPS-301, 302 only), Triple channel - two adjustable and one fixed output (5V or 3.3V) (LPS 304, 305 only)



## SPECIFICATIONS:

Model	LPS 301		LPS 302		LPS 303	LPS 304		LPS 305	
MAX. OUTPUT POWER	30 WATTS		60 WATTS		90 WATTS	70 WATTS		165 WATTS	
OUTPUT VOLTAGE	HIGH	LOW	HIGH	LOW					
Output voltage	0 to 15V	0 to 30V	0 to 15V	0 to 30V	0 to 30V	0 to +30V/ 0 to -30V	fixed 5V	0 to +30V/ 0 to -30V	fixed 3.3V/5V
Setting resolution	10mV	10mV	10mV	10mV	10mV	10mV		10mV	
Max. output voltage	16V	32V	16V	32V	32V	+32V/-32V		+32V/-32V	
Dual tracking						0 to ± 30V		0 to ± 30V	
Tracking deviation						± 20mV		± 20mV	
OUTPUT CURRENT									
Output current	0 to 2A	0 to 1A	0 to 4A	0 to 2A	0 to 2.5A	0 to 1A/0 to -1A	2A	0 to +2.5A/0 to -2.5A	3A
Setting resolution	1mA	1mA	1mA	1mA	1mA	1mA		1mA	
Max. output current	2.4A	1.2A	4.4A	2.4A	3A	+1.2A/-1.2A	CL≈2.2A	+3A/-3A	CL≈3.3A
Dual tracking						0 to ± 1A		0 to ± 2.5A	
Tracking deviation						± 2mA		± 5mA	
CONSTANT VOLTAGE CHARACTERISTICS									
Line regulation (for change of AC ± 10%)	1mV					1mV	5 mV	1mV	5mV
Load regulation (for load change 0~100%)	2mV					2mV	10mV	2mV	10mV
Ripple/noise rms (10Hz to 20MHz)	0.5mVrms					1.5mVrms	2mVrms	1.5mVrms	2mVrms
Ripple peak (p-p) (10Hz to 20MHz)	5mVp-p					10mVp-p	20mVp-p	10mVp-p	20mVp-p
Transient response	200 μs Typical					200 μs Typical		200 μs Typical	
Temperature coefficient	100 ppm/°C Typical								
CONSTANT CURRENT CHARACTERISTICS									
Line regulation (for change of AC ± 10%)	5mA Typical					15mA Typical		15mA Typical	
Load regulation (for change from short to full load)	5mA Typical					10mA Typical		10mA Typical	
Ripple/noise rms (10Hz to 20MHz)	1mA <sub>rms</sub> Typical					1mA <sub>rms</sub> Typical		1mA <sub>rms</sub> Typical	
Ripple peak (p-p) (10Hz to 20MHz)	5mA <sub>p-p</sub> Typical				10mA <sub>p-p</sub> Typical	5mA <sub>p-p</sub> Typical		5mA <sub>p-p</sub> Typical	
Temperature coefficient	200 ppm/°C Typical								
Display	2x16 LCD with backlit; Front Panel Status Annunciator with beeper								
Voltage Accuracy **	± (0.2% of rdg+2 digits)					± (0.2% of rdg+2 digits)		± (0.2% of rdg+2 digits)	
Current Accuracy **	± (0.5% of rdg+5 digits)					± (0.5% of rdg+5 digits)		± (0.5% of rdg+5 digits)	
Common-mode voltage	± 240 Vdc								
Temperature ratings	Operating 0°C to 40°C, Storage -40°C to 70°C (less than 80% RH)								
Dimensions (WxHxL)	8.7 "x 3.4 "x 11.8 "							8.4 "x 5.2 "x 15.7 "	
Weight	Approx.10 lbs		Approx. 12 lbs					Approx.18 lbs	
Cooling method	Forced Air								
Power 115V ac ± 10%	47 to 63 Hz, 1A, Approx. 250W		47 to 63 Hz, 2A, Approx. 120W		47 to 63 Hz, 2A, Approx. 150W	47 to 63 Hz, 2A, Approx. 110W		47 to 63 Hz, 4A, Approx. 250W	
Options	Opt 01(230 Vac; factory-installable only), Opt 02 (RS232; factory-installable only)								
Accessories	Instruction manual, power cord, fuse								

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



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Specifications subject to change without notice