

# RENTAL LAB-PS

## TRIPLE OUTPUT DESKTOP POWER SUPPLY



POSITIVE PROBLEM SOLVING **+ =**

These units pack a host of features into a convenient desktop case. The backlit menu driven LC-Display clearly shows the voltage and current for all 3 output channels simultaneously.

Values can be quickly and precisely preset by using the numbered keypad. A rotary encoder is also provided. While each output can be set independently the user can also combine channels 1 & 2. For example channel 2 can be set to copy the values entered for channel 1. The first 2 channels can also be programmed to operate in parallel or series mode to increase the output current or voltage. Adjustable OVP and OCP levels are also provided to help protect sensitive loads.

- + Adjustable Over Voltage and Over Current Protection
- + Timer Function for Automatic Switch Off
- + Series, Tracking and Parallel Modes
- + Precise & Accurate Measurements
- + RS232 & USB Interfaces
- + Front Panel Memory

# LAB-PS

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## FURTHER DETAILS

A key lock function, similar to a mobile phone, can be enabled to guard against accidental adjustment during operation. The transient response time to a load step change is excellent at <50us. The LAB-LPS 505N provides the fastest voltage rise with typical values being 1ms to full load. The LAB-PPS 3210 provides the best setting & readback resolutions of 1mV & 100µA across the whole voltage and current range. Both models are provided with RS232 and USB interfaces as standard. The set up parameters for each computer interface is accessed from the front panel. The unit's memory allows common set-ups to be saved and recalled. A last setting function enables a quick resumption of a test after the unit has been switched off. Another useful feature provided on both units is an adjustable timer. This can be set to switch the output off at any time interval between 1 second and 100 hours. This helps ensure that correct timings are observed for burn-in or chemical applications such as electroplating.

## RENTAL MODELS

### SELECTION TABLE

Part Number	Total Power	Channel 1 Voltage / Current / Power	Channel 2 Voltage / Current / Power	Channel 3 Voltage / Current / Power
LAB-LPS 505N-r	210W	0 - 30VDC / 0 - 3A / 90Wmax	0 - 30VDC / 0 - 3A / 90Wmax	0 - 15VDC / 0 - 5A / 30Wmax
LAB-PPS 3210-r	222W	0 - 32VDC / 0 - 3A / 96Wmax	0 - 32VDC / 0 - 3A / 96Wmax	0 - 15VDC / 0 - 5A / 30Wmax

## OUTPUTS

### TECHNICAL DATA

	LAB-LPS 505N			LAB-PPS 3210		
	Range 1	Range 2	Range 3	Range 1	Range 2	Range 3
Output Voltage	0 - 30Vdc	0 - 30Vdc	0 - 15Vdc	0 - 32Vdc	0 - 32Vdc	0 - 15Vdc
Output Current	0 - 3A	0 - 3A	0 - 5A	0 - 3A	0 - 3A	0 - 5A
Output Power	90W	90W	30W	90W	90W	30W

## PROGRAMMING

### TECHNICAL DATA

	LAB-LPS 505N			LAB-PPS 3210		
	Range 1	Range 2	Range 3	Range 1	Range 2	Range 3
V & I Resolution	10mV / 1mA	10mV / 1mA	10mV / 2mA	1mV / 100µA		
Voltage Accuracy	±0.05% + 20mV	±0.05% + 20mV	±0.05% + 6mV	±0.01% + 5mV		
Current Accuracy	±0.05% + 3mA	±0.05% + 3mA	±0.05% + 4mA	±0.01% + 1mA	±0.01% + 1mA	±0.01% + 2mA

## READ BACK

### TECHNICAL DATA

	LAB-LPS 505N			LAB-PPS 3210		
	Range 1	Range 2	Range 3	Range 1	Range 2	Range 3
V & I Resolution	10mV / 1mA	10mV / 1mA	3mV / 2mA	1mV / 100µA		
Voltage Accuracy	±0.05% + 20mV	±0.05% + 20mV	±0.05% + 6mV	±0.01% + 5mV		
Current Accuracy	±0.05% + 3mA	±0.05% + 3mA	±0.05% + 4mA	±0.01% + 1mA	±0.01% + 1mA	±0.01% + 2mA

# VOLTAGE RAMP TIMES

## TECHNICAL DATA

	LAB-LPS 505N	LAB-PPS 3210
Ramp Up Time (full load)	1ms	3ms
Voltage Accuracy	1ms	3ms
Current Accuracy	2½ms	8ms
Current Accuracy	250ms	250ms

# LINE AND LOAD REGULATION

## TECHNICAL DATA

	LAB-LPS 505N			LAB-PPS 3210		
	Range 1	Range 2	Range 3	Range 1	Range 2	Range 3
V & I Resolution	±0.01% + 2mV			±0.01% + 2mV		
Voltage Accuracy	±0.01% + 300µA			±0.01% + 300µA		
Current Accuracy	<3mV	<3mV	<5mV	<3mV	<3mV	<5mV
Current Accuracy	±0.01% + 300µA			±0.01% + 300µA		

# RIPPLE, NOISE & STABILITY

## TECHNICAL DATA

	LAB-LPS 505N			LAB-PPS 3210		
	Range 1	Range 2	Range 3	Range 1	Range 2	Range 3
Voltage (Ripple & Noise)	300µVrms/3mVpp	300µVrms/3mVpp	1mVrms/20mVpp	700µVrms/7mVpp	700µVrms/7mVpp	1mVrms/20mVpp
Current (Ripple & Noise)	<1mA			<1mA		
Voltage Stability	±<0.2% + 2mV [for const line & temp]			±<0.02% + 2mV [for const line & temp]		
Current Stability	±<0.1% + 1mA [for const line & temp]			±<0.01% + 1mA [for const line & temp]		

# OTHER

## TECHNICAL DATA

	LAB-LPS 505N	LAB-PPS 3210
Timer for Output Off	1sec to 100hours	1sec to 100hours
Voltage Temp Coefficient	10mV / 1mA	1mV / 100µA
Current Temp Coefficient	10mV / 1mA	1mV / 100µA
Transient Response	<50µs	<50µs
Common Mode Voltage	±240Vdc	±240Vdc
Screen	20 character × 4 line green backlit LCD	20 character × 4 line green backlit LCD
Weight	6.5kg	6.5kg
Dimensions (W × H × D)	216 × 135 × 432mm	216 × 135 × 432mm
Line Input	115 / 230Vac ±10% at 50/60Hz	115 / 230Vac ±10% at 50/60Hz

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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