

LAB-SL

DC POWER SUPPLY WITH ELECTRONIC LOAD



POSITIVE PROBLEM SOLVING **+ =**

The LAB-SL offers both DC source and load functions within a single instrument. The instrument can be used as a constant current load by simple push button selection.

When used as a DC source a precise output with a very low ripple is produced due to the linear controlled output stage. A very fast setting time of typically 250 μ s can be achieved. In both constant voltage and constant current operation the voltage and current can be preset and read on the digital display. The OVP level can also be preset and read.

- + Constant Voltage/Current, User Pre-set and Readable
- + Extremely Fast Setting Response (Approx. 250 μ s)
- + Two Quadrants Operation; Source and Load
- + Linear Controlled with Very Low Ripple
- + Desktop or 21HP x 6U Cassette

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FURTHER DETAILS

A wide selection of interfaces are available should the unit need to be operated remotely. 0-5Vdc or 0-10Vdc Isolated analogue interfaces can be integrated along with all the most popular methods of computer control.

TECHNICAL DATA

GENERAL

Input Voltage, Switchable	115/230 VAC \pm 10%
Isolation	3700 VAC; 4250 VDC
Line Regulation	[\pm 10%] CV: 0.0125%
Line Regulation	[\pm 10%] CC: 0.02%
Load Regulation	[10-90%] CV: 0.0125%
Load Regulation	[10-90%] CC: 0.02%
Programming Accuracy	$<\pm$ 0.5%
Offset	$<\pm$ 4.0 mV
Ripple [Vpp] CV	$<$ 4.0 mV
Ripple [Vrms] CC	$<$ 4.0 mA ($<$ 8.0 mA for LAB-SL 8)
Temperature Coefficient	25 ppm/ $^{\circ}$ C
Transient Response Time	$<$ 100 μ s
Response Time	$<$ 500 μ s (typ. $<$ 250 μ s)
Sense [V / Line]	1.0 V [2.0 V for LAB-SL 8]
Display	3.5 digits for V and I
Protection	OC / OV / OT / OP
Analogue Interface	0 - 5 [10] V
Isolated Analogue Interface	0 - 5 [10] V
Interface RS232/RS485/USB	12 Bit
Interface CAN	12 Bit
Interface IEEE 488.2	12 Bit
Operating Temperature	0 - 50 $^{\circ}$ C
Operating Humidity	0 - 90% (non condensing)
Power Derating 50 - 70 $^{\circ}$ C	-2%/ $^{\circ}$ C
Cooling 120 / 240 W	Forced air front to back
Storage Temperature	-45 to + 85 $^{\circ}$ C
Storage Humidity	10 - 95% (non condensing)

SELECTION TABLE

Part Number	Max. Power	Q1 Source Voltage	Q4 Sink Voltage	Current Range	Dimensions [W × H × D]
LAB-SL 8	120W	0 - 8VDC	1 - 8VDC	0 to ± 15A	112 × 222 × 360mm
LAB-SL 15	120W	0 - 15VDC	1 - 15VDC	0 to ± 8A	112 × 222 × 360mm
LAB-SL 30	120W	0 - 30VDC	1 - 30VDC	0 to ± 4A	112 × 222 × 360mm
LAB-SL 60	120W	0 - 60VDC	1 - 60VDC	0 to ± 2A	112 × 222 × 360mm
LAB-SL 120	120W	0 - 120VDC	1 - 120VDC	0 to ± 1A	112 × 222 × 360mm
LAB-SL 28	240W	0 - 8VDC	1 - 8VDC	0 to ± 30A	224 × 222 × 360mm
LAB-SL 215	240W	0 - 15VDC	1 - 15VDC	0 to ± 16A	224 × 222 × 360mm
LAB-SL 230	240W	0 - 30VDC	1 - 30VDC	0 to ± 8A	224 × 222 × 360mm
LAB-SL 260	240W	0 - 60VDC	1 - 60VDC	0 to ± 4A	224 × 222 × 360mm
LAB-SL 2120	240W	0 - 120VDC	1 - 120VDC	0 to ± 2A	224 × 222 × 360mm

OPTIONS

CODE	DESCRIPTION
/10POT	Potentiometer with scale
/6HE	Unit built in a 21HP × 6U euro cassette
/AF	Adjustable foot
/AI-5	0 - 5V analogue interface for all control and measurement functions
/AI-10	0 - 10V analogue interface for all control and measurement functions
/ATE	No front panel control or display. Analogue interface provided as standard
/ATI-5	Isolated 0 - 5V analogue interface for all control and measurement functions
/ATI-10	Isolated 0 - 10V analogue interface for all control and measurement functions
/ECS6	19" × 6U rack for up to 4 euro cassettes
/ECT	19" × 6U unit frame for up to 4 desktop units
/EP21	6U × 21HP grey blanking plate
/EP42	6U × 42HP grey blanking plate
/LT	IEEE 488.2 interface
/LT+LTRS232	IEEE 488.2 and RS-232 interfaces
/LT+LTRS485	IEEE 488.2 and RS-485 interfaces
/LTRS232	RS-232 interface
/LTRS485	RS-485 interface
/TG	Carrying handle
/USB	USB interface

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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