ELECTRONIC TEST & POWER SYSTEMS

LAB-S

RACKMOUNTING LINEAR DC POWER SUPPLIES

POSITIVE PROBLEM SOLVING

The LAB-S range of DC Power Supplies are ideal for use in applications where high power coupled with fast and precise regulation is paramount.

A thyristor pre-regulation circuit provides the DC to the linearly controlled MOS output stage ensuring a very low ripple. This results in a unit that is smaller, lighter and more efficient than many other linear supplies. The LAB-S range features a standby function so that the voltage and current output can be preset and then instantaneously applied. All units are fitted with thermal overload protection and adjustable over voltage protection.

- Voltage and Current can be Preset and Read
- Optional Computer and Analogue Interfaces
- Very Low Ripple and Fast Response Times
- Constant Voltage and Current Operation
- Output Galvanically Isolated from Input
- Floating Outputs

FURTHER DETAILS

Sense terminals are provided to counter voltage losses in the output cables. Computer interfaces can be optionally fitted to your chosen unit. USB, IEEE 488.2 and RS-232 or RS-485 are available. Isolated or normal analogue interfaces with 2 voltage ranges are also offered. The choice of interfaces combined with the /ATE option (no front panel control or display) ensures that this range is ideal for system integration.

The design of this series of DC Sources allows non-standard output voltages, currents and powers to be accommodated for. On request units can be built up to 250A, 500V at a maximum of 12kW.

TECHNICAL DATA

TECHNICAL DATA	
Insulation	3700VAC, 425VDC
Input Voltage	230VAC ± 10% 50/60Hz (<1500W), 3 × 400VAC 50 / 60Hz (>2kW)
Voltage Regulation	0.05%
Current Regulation	0.1%
Ripple	0.01% + 4mVrms
Programming Accuracy	<± 0.5%
Sense (Remote)	1.0V
Display	3.5 Digits for V and I
Protection	OC / OV / OT / OP
Response Time	Typically <100µS
Operating Temperature	0°C - 50°C
Operating Humidity	0 - 90% (non condensing)
Operating Modes	Constant voltage and constant current
Analogue Interface Option	0 - 5VDC or 0 - 10VDC
Power Derating (50 - 70°C)	-2%/°C

Different output ranges and application/user specific options are possible. Please contact ETPS Ltd to discuss your requirements.

SELECTION TABLE

Part Number	Max. Power	Voltage Range	Current Range	Dimensions (W × H × D)
LAB-S 05-35	500W	0 - 35VDC	0 - 14A	19" × 4U × 434mm
LAB-S 05-70	500W	0 - 70VDC	0 - 7A	19" × 4U × 434mm
LAB-S 05-150	500W	0 - 150VDC	0 - 3A	19" × 4U × 434mm
LAB-S 07-35	750W	0 - 35VDC	0 - 21A	19" × 4U × 434mm
LAB-S 07-70	750W	0 - 70VDC	0 - 10A	19" × 4U × 434mm
LAB-S 07-150	750W	0 - 150VDC	0 - 5A	19" × 4U × 434mm
LAB-S 10-35	1000W	0 - 35VDC	0 - 28A	19" × 4U × 434mm
LAB-S 10-70	1000W	0 - 70VDC	0 - 14A	19" × 4U × 434mm
LAB-S 10-150	1000W	0 - 150VDC	0 - 6A	19" × 4U × 434mm
LAB-S 15-35	1500W	0 - 35VDC	0 - 42A	19" × 4U × 434mm
LAB-S 15-70	1500W	0 - 70VDC	0 - 20A	19" × 4U × 434mm
LAB-S 15-150	1500W	0 - 150VDC	0 - 10A	19" × 4U × 434mm
LAB-S 20-35	2000W	0 - 35VDC	0 - 56A	19" × 6U × 434mm
LAB-S 20-70	2000W	0 - 70VDC	0 - 28A	19" × 6U × 434mm
LAB-S 20-150	2000W	0 - 150 VDC	0 - 12A	19" × 6U × 434mm
LAB-S 25-35	2500W	0 - 35VDC	0 - 71A	19" × 6U × 434mm
LAB-S 25-70	2500W	0 - 70VDC	0 - 35A	19" × 6U × 434mm
LAB-S 25-150	2500W	0 - 150VDC	0 - 16A	19" × 6U × 434mm
LAB-S 30-35	3000W	0 - 35VDC	0 - 85A	19" × 6U × 434mm
LAB-S 30-70	3000W	0 - 70VDC	0 - 42A	19" × 6U × 434mm
LAB-S 30-150	3000W	0 - 150VDC	0 - 20A	19" × 6U × 434mm
LAB-S 35-35	3500W	0 -35VDC	0 - 100A	19" × 6U × 434mm
LAB-S 35-70	3500W	0 - 70VDC	0 - 50A	19" × 6U × 434mm
LAB-S 35-150	3500W	0 - 150VDC	0 - 23A	19" × 6U × 434mm
LAB-S 40-70	4000W	0 - 70VDC	0 - 57A	19" × 10U × 434mm
LAB-S 40-150	4000W	0 - 150VDC	0 - 26A	19" × 10U × 434mm
LAB-S 45-70	4500W	0 - 70VDC	0 - 64A	19" × 10U × 434mm
LAB-S 45-150	4500W	0 - 150VDC	0 - 30A	19" × 10U × 434mm

OPTIONS

CODE	DESCRIPTION
/10POT	Potentiometer with scale
/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
/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
/3P	3 phase input (standard for 2kW and above)
/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.

“WE ARE POSITIVE PEOPLE”

ETPS engineer electronic power supply and testing systems. Our problem solving skills provide the spark of innovation to some of the world’s leading technology brands.

ETPS
ELECTRONIC TEST & POWER SYSTEMS

Tel: +44 (0) 1246 452909
Sales: 0800 612 95 75
sales@etps.co.uk
www.etps.co.uk

ETPS Ltd
Unit 14, The Bridge
Beresford Way, Chesterfield
S41 9FG

POSITIVE PROBLEM SOLVING