



Unit 14, The Bridge, Beresford Way  
 Chesterfield, Derbyshire, S41 9FG, UK  
 T e l : + 44 (0) 1246 452909  
 F a x : + 44 (0) 1246 452942  
 W e b : w w w . e t p s . c o . u k  
 E m a i l : s a l e s @ e t p s . c o . u k  
 S a l e s : 0 8 0 0 6 1 2 9 5 7 5

# LAB-HP

# Compact High Power DC Source

## Description

The LAB-HP provides up to 15kW of power in just a 3U high case. The 10 turn digitally encoded potentiometer allow for straight forward front panel operation. The large display indicates all relevant output quantities simultaneously. Output values can be preset and read prior to releasing the output. ATE options are offered for system integration. Isolated analogue interfaces with proportional 0-5Vdc or 0-10Vdc control are available. If computer control is required then any combination of Integrated RS232, RS485, GPIB, USB & LAN interfaces can be specified. The LAB-HP's compact design delivers high efficiencies of up to 94%. The power supply can be operated in constant current, voltage, power or resistance modes. The adjustable internal resistance and optional automotive starting curves make this range ideal for automotive simulation as well as general laboratory and production work. A PV operation mode is built in as standard. This enables a photo-voltaic generator's MPP tracking to be simulated. The MPP is available in both voltage and current modes. An SD card slot can be specified on order. This is a useful feature to enable the DC Source to follow pre-determined voltage and current curves. Data is programmed on a PC using text or .WAV formats. It can then be simply transferred to an SD card and recalled from the front panel of the LAB-HP. The data card can also be used for data logging. Output values can be recorded at intervals of 1 sec to 71 mins. The front panel display indicates when the unit is logging data and will alert the user when the memory card becomes full. ET's legendary flexibility allows non-standard outputs and customer specific options to be provided on request. This helps to ensure that the LAB-HP is suitable for the widest variety of applications.



- CV, CC, CP, R & PVsim Modes
- Simple Front Panel Operation
- Memory Card Slot Option
- Optional Computer Interfaces
- Datalogging Capability
- Worldwide Input Options

## Selection Table

Output Voltage	Max Power	Output Current	Part Number	Output Voltage	Max Power	Output Current	Part Number
0-40V	5kW	0-125A	LAB-HP 540	0-300V	5kW	0-17A	LAB-HP 5300
0-40V	10kW	0-250A	LAB-HP 1040	0-300V	10kW	0-34A	LAB-HP 10300
0-40V	15kW	0-375A	LAB-HP 1540	0-300V	15kW	0-50A	LAB-HP 15300
0-40V	20kW	0-500A	LAB-HP 2040	0-300V	20kW	0-66A	LAB-HP 20300
0-40V	30kW	0-750A	LAB-HP 3040	0-300V	30kW	0-100A	LAB-HP 30300
0-80V	5kW	0-65A	LAB-HP 580	0-600V	5kW	0-8.5A	LAB-HP 5600
0-80V	10kW	0-130A	LAB-HP 1080	0-600V	10kW	0-17A	LAB-HP 10600
0-80V	15kW	0-195A	LAB-HP 1580	0-600V	15kW	0-25A	LAB-HP 15600
0-80V	20kW	0-250A	LAB-HP 2080	0-600V	20kW	0-33A	LAB-HP 20600
0-80V	30kW	0-375A	LAB-HP 3080	0-600V	30kW	0-50A	LAB-HP 30600
0-100V	5kW	0-50A	LAB-HP 5100	0-1000V	5kW	0-5A	LAB-HP 51000
0-100V	10kW	0-100A	LAB-HP 10100	0-1000V	10kW	0-10A	LAB-HP 101000
0-100V	15kW	0-150A	LAB-HP 15100	0-1000V	15kW	0-15A	LAB-HP 151000
0-100V	20kW	0-200A	LAB-HP 20100	0-1000V	20kW	0-20A	LAB-HP 201000
0-100V	30kW	0-300A	LAB-HP 30100	0-1000V	30kW	0-30A	LAB-HP 301000
0-150V	5kW	0-35A	LAB-HP 5150	0-1200V	5kW	0-4A	LAB-HP 51200
0-150V	10kW	0-70A	LAB-HP 10150	0-1200V	10kW	0-8A	LAB-HP 101200
0-150V	15kW	0-100A	LAB-HP 15150	0-1200V	15kW	0-12A	LAB-HP 151200
0-150V	20kW	0-133A	LAB-HP 20150	0-1200V	20kW	0-16A	LAB-HP 201200
0-150V	30kW	0-100A	LAB-HP 30150	0-1200V	30kW	0-25A	LAB-HP 301200

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



sales@etps.co.uk  
0800 612 95 75

# LAB-HP

# Compact High Power DC Source

## Options Table

Code	Description
/3P208.....	3 Phase Input of 3 * 208 (187 - 229Vac), 50/60Hz
/3P400.....	3 Phase Input of 3 * 440 (396 - 484Vac), 50/60Hz
/3P480.....	3 Phase Input of 3 * 480 (432 - 528Vac), 50/60Hz
/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
/USB.....	USB Interface with both listener and talker functions
/LT.....	IEEE 488.2 (GPIB) Interface with both listener and talker functions
/LTRS232.....	RS232 Interface with both listener and talker functions
/LTRS485.....	RS485 Interface with both listener and talker functions
/LAN.....	Ethernet interface with listener and talker functions over a LAN
/KFZ12.....	Output follows a 12Vdc automotive cranking curve
/KFZ24.....	Output follows a 24Vdc automotive cranking curve
/KFZXX.....	Output follows a user specific curve
/SD.....	Integrated memory card slot on the front panel

## Technical Data

Input voltage.....	3 * 400Vac ± 10%
Input frequency.....	47 to 63Hz
Harmonics.....	EN61000-3-2 A14
Isolation (Input / Output).....	3000Vac
Isolation class.....	1
Safety.....	EN60950
Emissions.....	EN61000-6-4
Immunity.....	EN61000-6-2
Voltage regulation.....	±0.05% + 2mV
Current regulation.....	±0.1% + 2mA
Response time (10%-90%).....	<0.5ms (typ)
Ripple & noise.....	<0.025% mV <sub>RMS</sub> FS
Stability.....	0.05% V <sub>MAX</sub>
Overvoltage protection.....	105%-110% V <sub>MAX</sub>
PV Voltage Simulation Mode (V <sub>MPP</sub> ).....	0.6 to 0.95 * V
PV Current Simulation Mode (I <sub>MPP</sub> ).....	0.6 to 0.95 * I
Remote sense capability (<35V).....	2V
Remote sense capability (>35V).....	5V
Display.....	3½ digits for V & I
Protections.....	OC / OV / OT / OP
Optional Analogue interfaces.....	0 - 10Vdc or 0-5Vdc
Optional Computer interfaces.....	12 Bit
Maximum internal resistance.....	CR <sub>MAX</sub> = V <sub>MAX</sub> /I <sub>MAX</sub>
Minimum Internal Resistance.....	CR <sub>MIN</sub> = (V <sub>MAX</sub> /I <sub>MAX</sub> ) / 10
Operating temperature.....	0 to +50 °C
Storage temperature.....	-45 °C to +85 °C
Operating/Storage humidity.....	0 to 95% (non condensing)
Derating 50 °C - 70 °C.....	-2% per °C
Cooling.....	Forced air
Air flow.....	Front to back
Weight (5kW/10kW/15kW/20kW/30kW).....	19 / 26 / 33 / 52 / 66 kgs
Dimensions (5kW/15kW/15kW).....	19" x 3U x 620mm
Dimensions (20kW/30kW).....	19" x 6U x 620mm
Vibration.....	10-55Hz /1min/2G XYZ
Shock.....	Less than 20G

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ET 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. ET 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.