

HV-LAB Series

AC/DC High voltage bench-top power supplies



- ◇ Reference: HV-LAB-xxxx-x
- ◇ Vin: universal 85-264Vac
- ◇ Vout: 0V to 6000V
- ◇ Pout: from 0.1 to 6W



General Description

◇ The HV-LAB series is a compact high voltage AC/DC bench-top power supply with adjustable output voltage. The HV-LAB power supplies is equipped with 4.3" resistive touch LSD screen on the front panel. Associate with a rotating knob for instantaneous and precise adjustment of settings. For remote operation, the device offers a USB-B and a SUBD9 connectors on the rear panel for voltage / current control and monitoring via USB serial (COM) and RS232 protocols. Others communications buses can be implemented on rear panel SUBD9 connector upon request (ex: CAN interface, RS485...).

Bench-top configuration	Wide range of outputs	Overload, short-circuit and arc protections
Single positive or negative output	Current and/or voltage monitoring	

Parameters	Specifications
Input voltage Vin	Universal 85-264 VAC
Mains ON/OFF controls	Switch on rear panel
Output voltage vout	From 0V to 6000V
Output power pout	From 0.1W to 6W depending on the model
Polarity	Positive (P) / Negative (N) depending on the model
Load voltage regulation	± 0.01% of full output voltage for no load to full load - typically and according to type
Line voltage regulation	± 0.01% of full output voltage over specified input voltage range - typically and according to type
Residual ripple	< 0.05% typically and according to type
Temperature coefficient	100ppm/°C (higher stability upon request)

MODE SPECIFICATIONS

Parameters	Local mode specifications	Remote mode specifications
Local / remote mode High Voltage ON/OFF Voltage setting Current setting (if available)	Via screen touch display controles	Via USB – Serial mode on rear panel Via RS232 protocol on rear panel



HV-LAB Series

AC/DC High voltage bench-top power supplies

MONITORING

Parameters	Local mode monitoring	Remote mode monitoring
Output voltage monitoring Output current monitoring (if available)	On screen touch display	Via USB – Serial mode on rear panel Via RS232 protocol on rear panel

MECHANICAL CONFIGURATION

Parameters	Specifications
Insulation	High voltage assembly fully potted in an epoxy resin or another specially selected material
Case	High impact ABS. UL94-V0 Lid & base 1mm thick steel, Side profiles extruded 6063 aluminium
Dimensions	L170 x W225 x H80 mm
Supply input	IEC 320 type AC connector fuse (L 500mA) on rear panel
High voltage connector	Secured SHV connector on rear panel

FRONT PANEL



-Display : 4.3» TFT LCD Transmissive Display with 480x272 Resolution, and 262K Colours.

-Adjust knob : round aluminium rotative knob with push button (24mm diameter)

-Emergency Stop switch shuts down HV output.

REAR PANEL



AC input : IEC 320 type AC connector fuse (L 500mA)

USB : USB-B port for remote control.

SUBD9: RS232 communication and additional remote control upon request.

HV connector : depending on HV model ordered.

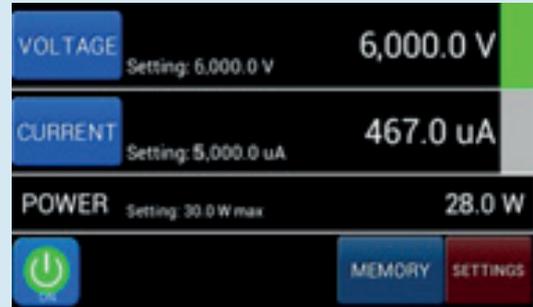
HV-LAB Series

AC/DC High voltage bench-top power supplies

GRAPHIC USER INTERFACE CONTROL

Main panel control display:

- Voltage setting defined by user
- Voltage monitoring provide by HV module
- Current setting defined by user (if available)
- Current monitoring provided by HV module (if available)
- Power monitoring (if current monitoring available)
- ON/OFF button activate HV output
- Settings button
- Memory button to save or recall user defined outputs



Voltage and current settings control display:

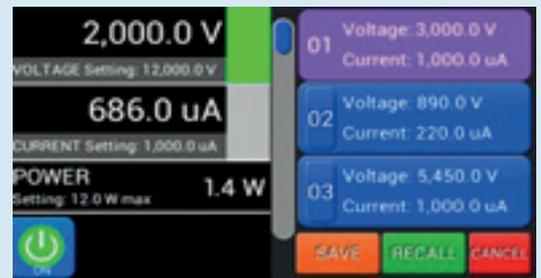
- Voltage and current defined by keyboard
- Power max display

« On the main panel, you can change the voltage or current settings by using the "adjust knob"»



Save and recall settings control display:

- 10 settings (voltage and current can be memorized and recall at anytime)



This High Voltage power supply satisfies the requirements of EC Directives Safety.

Non contractual document.

All specifications are subject to change without notice.

Rev.A 05/19

SDS
High Voltage



Systems
Development
& Solutions

SDS High Voltage - Systems Development & Solutions
53 rue Bourdignon - 94100 Saint-Maur-des-Fossés
France - +33 (0)1 84 23 11 10 - contact@sdsHV.com
www.sdsHV.com