

LNC HIGH VOLTAGE POWER SUPPLY

Output Voltage up to 30,000 Volts



High Voltage Benchtop Power Supplies up to 30,000 V

User-friendly laboratory power supplies for DC high voltage in a compact design

Accuracy is among the most important requirements for scientific work in laboratories. Heinzinger has therefore developed the LNC laboratory power supplies with precise DC high voltage, which meet the high demands in the laboratory.

Depending on the version, they deliver 30,000 Volts at an output power of up to 60 Watts. The switched-mode power supplies are characterized by high regulation accuracy while having low residual ripple.

All units come with 3.5-digit digital displays, separately for voltage and current. Likewise, voltage and current can be adjusted separately, each via a separate 10-turn potentiometer.

The user-friendly devices are available in various voltage and current ranges and can be regulated up to the nominal voltage and current.

The power supplies can be ordered with either positive or negative polarity. Using control cables available as accessories, positive and negative devices can also be connected in order to obtain a symmetrical plus-minus power supply.

Due to the standard built-in analog interface all LNC units can be controlled externally by a 0...10 V signal.

LNC-Series Highlights

- Output voltages up to 30,000 V
- Output power up to 60 W
- Output currents up to 500 mA
- Compact benchtop power supply
- Suitable for resistive, inductive and capacitive loads
- Continuous short circuit proof
- Analog interface

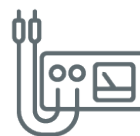
Typical Applications



Laboratory applications



Component tests



Electrophoresis



HV tests

LNC HIGH VOLTAGE POWER SUPPLY

Technical Data

General

Function	switch mode power supply
Input voltage	230 V ± 10 % other on request
Input frequency	47 ... 63 Hz
Input current	type-dependent
Ambient temp.	0 °C ... 40 °C

Displays

Output voltage	3.5-digit digital display
Output current	3.5-digit digital display
Voltage control (CV-mode)	LED
Current control (CC-mode)	LED

Output

Discharge time (without load)	<60 s (type-dependent)
Output voltage	positive or negative connected to earth
Output socket	Heinzinger HV-socket, passed through to the output voltage

Analog Interface for remote control

Voltage adjustment	0...10 V
Current adjustment	0...10 V
Voltage monitor	0...10 V
Current monitor	0...10 V
Output on/off	contact NC = on
Connector	15-pin Sub-D-socket

Enclosure

Bench case version, width 290 mm, height 112.5 mm, depth 307 mm

Voltage stabilization

Setting range	approx. 0.2 % to 100 % U_{nom}
Setting accuracy (manual operation)	± 0.02 % U_{nom}
Line regulation (at ± 10 % mains voltage change due to load change)	$< \pm 0.01$ % U_{nom}
Load regulation (on load step from 0 to 100%)	< 0.05 % U_{nom}
Response time (approx.) (on load current change from 0 to 100%)	5 ms to 2 % U_{nom} deviation 30 ms to 0.2% U_{nom} deviation
Stability (under constant conditions)	≤ 0.05 % U_{nom} over 8 h
Temperature coefficient	≤ 0.05 % U_{nom} / K
Ripple	≤ 0.02 % pp U_{nom}

Current stabilization

Setting range	approx. 0.2 % to 100 % I_{nom}
Setting accuracy (manual operation)	± 0.02 % I_{nom}
Line regulation (at ± 10 % mains voltage change due to load change)	$< \pm 0.01$ % I_{nom}
Load regulation (on 90% load change)	< 0.3 % I_{nom}
Response time (on output voltage change of around ± 10 % due to load change)	< 100 ms
Stability (under constant conditions)	≤ 0.05 % I_{nom} over 8 h
Temperature coefficient	≤ 0.05 % I_{nom} / K
Ripple	≤ 0.05 % pp

Scope of supply

- Heinzinger LNC unit according to type description
- Heinzinger HV-cable with HV-connector, length 3 m
- Power cable 1.5 m, with connector (CEE7)
- Plug for analog interface
- User manual (German/English)

Accessories / Options:

- 19" mounting frame / 3U Eco-OB2, to mount LNC unit in 19" rack

Product Summary LNC

Type	Voltage (V DC)	Current (mA)	Power (W)	Height (mm)	Rack Depth (mm)	Part number*
LNC 100 - 200	0 ... 100	0 ... 200	20	112.5	290	00.220.300.x
LNC 100 - 500		0 ... 500	50	112.5	290	00.220.301.x
LNC 300 - 100	0 ... 300	0 ... 100	30	112.5	290	00.220.302.x
LNC 300 - 200		0 ... 200	60	112.5	290	00.220.303.x
LNC 600 - 50	0 ... 600	0 ... 50	30	112.5	290	00.220.304.x
LNC 600 - 100		0 ... 40	60	112.5	290	00.220.305.x
LNC 1200 - 20	0 ... 1,200	0 ... 20	24	112.5	290	00.220.306.x
LNC 1200 - 50	0 ... 1,200	0 ... 50	60	112.5	290	00.220.307.x
LNC 3000 - 10	0 ... 3,000	0 ... 10	30	112.5	290	00.220.308.x
LNC 3000 - 20	0 ... 3,000	0 ... 20	60	112.5	290	00.220.309.x
LNC 6000 - 5	0 ... 6,000	0 ... 5	30	112.5	290	00.220.310.x
LNC 6000 - 10	0 ... 6,000	0 ... 10	60	112.5	290	00.220.311.x
LNC 10000 - 2	0 ... 10,000	0 ... 2	20	112.5	290	00.220.312.x
LNC 10000 - 5	0 ... 10,000	0 ... 5	50	112.5	290	00.220.313.x
LNC 20000 - 3	0 ... 20,000	0 ... 3	60	112.5	290	00.220.314.x
LNC 30000 - 2	0 ... 30,000	0 ... 2	60	112.5	290	00.220.315.x

*All devices are available with positive x = 1 or negative x = 9 polarity

Other High Voltage Power Supplies

EVO – The new generation of high voltage power supplies



The EVO series supplies your application with constant and reliable high voltage. Both state-of-the-art technology and software have been developed for these units for intuitive operation and protection for the high-voltage power supply, test equipment and personal.

Features

- DC voltage classes: 1.5 kV / 5 kV / 10 kV
- Precision: 0.01 %
- Reversible polarity, positive or negative
- Output power: 2 kW or 3 kW
- Output current up to 2,000 mA
- Wide range AC input, singlephase
- Ethernet and RS232 interfaces on board
- Comprehensive protective functions, e.g. OVP & OCP
- Interlock contacts as standard
- For worldwide use, compliant with CSA, UL & CE
- Innovative operating concept & HMI



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