

LNCE HIGH VOLTAGE POWER SUPPLY

Output Voltage up to 20,000 Volts





High Voltage Cassette Power Supplies up to 20,000 Volts

Modules up to 20,000 Volts, as DC/DC power supplies

The LNCE series high voltage modules are ideal for applications that require a reliable high voltage power supply of up to 30 Watts thanks to their compact size and robust design. They operate as primary switched DC/DC converters with an input voltage of 24 Volts and can be controlled via a 0...10 V analog interface.

These supplies are used in quality assurance and high-voltage tests as well as electrostatic applications. The various control and readout options via the analog interface allow easy adaptation to the specific application.

Heinzinger LNCE modules come in various performance classes with a voltage range of up to 20,000 Volts, and can be supplied with either positive or negative polarity.

For units with more than 10 kV, the high voltage part is sealed to ensure the best possible long-term stability and compact dimensions. The LNCE is built as 19" cassettes, however customized variants without housing are available on request.

LNCE-Series Highlights

- Output voltages up to 20,000 V
- Output power up to 30 W
- Input voltage 24 V DC
- 19" cartridge, 3U, 14 slots
- Low residual ripple, up to 100 ppm
- Continuous short circuit proof
- Automatic transition from voltage to current source mode
- Remote controllable via integrated analog interface 0...10 V

Typical Applications



Semiconductor tests / manufacturing



HV tests



Quality tests



Equipment tests



Electrostatic applications



LNCE HIGH VOLTAGE POWER SUPPLY

Technical Data

General	
Function	switch mode
	DC/DC power supply
Input voltage	24 V DC ±10 %
Input current	type-dependent (max. 2.5 A)
Ambient temp.	0 °C 40 °C
Output	

Ambient temp.	0 C 40 C
Output	
Discharge time (without load)	<10 s (type-dependent)
Output voltage	positive or negative connected to earth
Output socket	Heinzinger HV cable 0.5 m

Analog Interface for remote control

Voltage adjustment	010 V
Current adjustment	010 V
Voltage monitor	010 V
Current monitor	010 V
Voltage control	signal
(CV-mode)	
Current control	signal
(CC-mode)	
Output on/off	contact NO = on
Connector	multipoint connector
	24+7 pol. (DIN 41612)

Enclosure

3U cassette, depth 169 mm, width 14 HP (= 70.8 mm), weight approx. 0.9 kg

Scope of supply

- Heinzinger LNCE unit according to type description
- · Plug for multipoint connector
- User manual (German/English)

Voltage stabilization	
Setting range	approx. 1 % to 100 % Unor
Setting accuracy	≤0.1 % U _{nom}
Line regulation	<0.01 % Unom
(at ±10% mains voltage change	
due to load change)	
Load regulation	≤0.05 % U _{nom}
(on load step from 0 to 100%)	
Response time	≤100 ms
(on load current change from 0 to 100%)	
Stability	≤0.05 % Unom over 8h
(under constant conditions)	
Temperature coefficient	≤0.1 % U _{nom} /K
Ripple (output voltage <3 kV)	≤0.1 % pp U _{nom}
Ripple (output voltage ≥3 kV)	≤0.05 % pp Unom
Comment atability the	

Current stabilization

Setting range	approx. 1 % to 100 % Inom
Setting accuracy	≤0.1 % Inom
Line regulation	<±0.01 % Inom
(at ±10% mains voltage change	
due to load change)	
Load regulation	<0.05 % Inom
(on output voltage change of	
around ±10% due to load change)	
Response time	≤100 ms
(on output voltage change of	
around ±10% due to load change)	
Stability	≤0.05 % Inom over 8h
(under constant conditions)	
Temperature coefficient	≤0.05 % I _{nom} /K
Ripple (output voltage <3 kV)	≤0.1 % pp I _{nom}
Ripple (output voltage ≥3 kV)	≤0.05 % pp Inom



Product Summary LNCE

Туре	Voltage (V DC)	Current (mA)	Power (W)	Height (U)	Rack Depth (mm)	Width (TE)	Part number*
LNCE 300 - 10	0 300	0 10	3	3	169	14	00.220.630.x
LNCE 300 - 100		0 100	30	3	169	14	00.220.631.x
LNCE 600 - 5	0 600	0 5	3	3	169	14	00.220.632.x
LNCE 600 - 50		0 50	30	3	169	14	00.220.633.x
LNCE 1500 - 2	0 1,500	0 2	3	3	169	14	00.220.634.x
LNCE 1500 - 20		0 20	30	3	169	14	00.220.635.x
LNCE 3000 - 1	0 3,000	0 1	3	3	169	14	00.220.636.x
LNCE 3000 - 10		0 10	30	3	169	14	00.220.637.x
LNCE 6000 - 1	0 6,000	0 1	6	3	169	14	00.220.638.x
LNCE 6000 - 5		0 5	30	3	169	14	00.220.639.x
LNCE 10000 - 05	0 10,000	0 05	5	3	169	14	00.220.640.x
LNCE 10000 - 3		0 3	30	3	169	14	00.220.641.x
LNCE 20000 - 02	0 20,000	0 02	4	3	169	14	00.220.642.x
LNCE 20000 - 1		0 1	20	3	169	14	00.220.643.x

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

Other High Voltage Power Supplies

NCE - High Voltage Power Supplies



The Heinzinger NCE high voltage cassettes provide high voltage up to 30,000 Volts as a primary switched mode power supply, depending on the type and design, in a current range between 1 and 600 mA.

Features

- · Voltage up to 30,000 Volts
- Output power up to 30 and 60 Watts
- · Output current up to 600 mA
- Input voltage 24 V DC
- 19" cartridge, 3U
- · Low ripple

- · Continuous short circuit proof
- Automatic transition from voltage to current source mode
- Remote controllable and extandable via integrated analog interface, for voltage and current setup as well as acknowledgement

