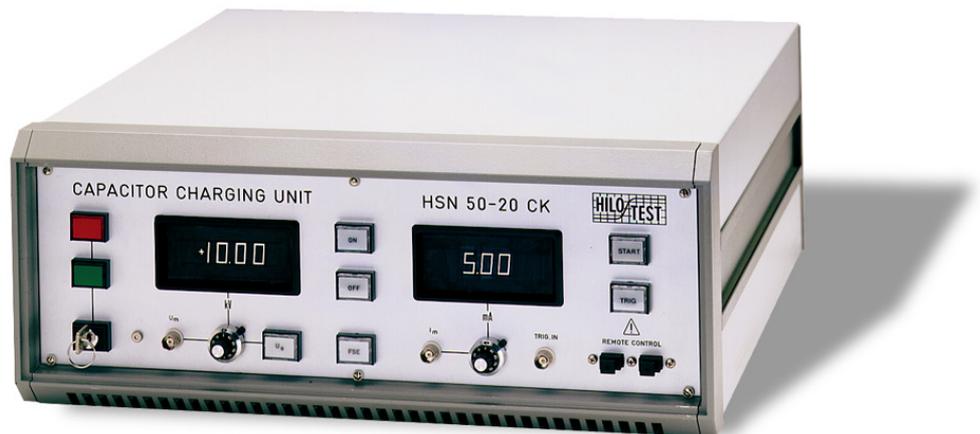


High Voltage Power Supply Capacitor charging unit

HSN ...

HCN ...

**High precision switch-mode power supplies
with clock frequency 20 kHz**

2.0 kV - 60 kV**0.5 kW - 2.0 kW****short circuit proof****remote control
via optical link**

High precision power supplies series HSN ... are switch-mode power supplies with clock frequency 20 kHz. Resulting low ripple and excellent regulating characteristic. Output voltage and output current are regulated; both values are adjustable by potentiometers and are displayed on the front panel. Moreover standard output signals, 0 - 10 V, which are proportional to the output voltage and output current, are available at the monitor outputs.

Capacitor charging units series HCN ... use the same principle of operation and are used to charge energy storage capacitors of high-voltage pulse generators. Charging voltage and charging current may be adjusted separately, actual values are displayed digitally. Upon operating key START, the charging procedure is initiated. The charging voltage rises linearly. If the preselected charging voltage is reached the unit changes from current regulation to voltage regulation, the charging voltage at the energy storage capacitor is kept constant.

Moreover, the capacitor charging units can be fitted out with a trigger impulse generator. Upon operating key TRIGGER, the charging unit is switched off, a trigger pulse is generated which can be used to trigger the discharge switch of the pulse generator. Trigger modules and pulse transformers suitable for triggering spark gaps, ignitrons, thyratrons etc. as well as trigger systems with optical trigger pulse transmission are available.

On special request the trigger module can be integrated in the capacitor charging unit, see Option 2.

Available Types:
HSN ... / HCN ...
High-voltage Power Supplies, Series HSN Capacitor Charging Units, Series HCN

HSN 2-500 / HCN 2-500	0 - 2 kV, 0 - 500 mA	1.0 kW
HSN 4-400 / HCN 4-400	0 - 4 kV, 0 - 400 mA	1.6 kW
HSN 10-100 / HCN 10-100	0 - 10 kV, 0 - 100 mA	1.0 kW
HSN 10-200 / HCN 10-200	0 - 10 kV, 0 - 200 mA	2.0 kW
HSN 20-100 / HCN 20-100	0 - 20 kV, 0 - 100 mA	2.0 kW
HSN 25- 40 / HCN 25- 40	0 - 25 kV, 0 - 40 mA	1.0 kW
HSN 30- 50 / HCN 30- 50	0 - 30 kV, 0 - 50 mA	1.5 kW
HSN 40- 25 / HCN 40- 25	0 - 40 kV, 0 - 25 mA	1.0 kW
HSN 50- 20 / HCN 50- 20	0 - 50 kV, 0 - 20 mA	1.0 kW
HSN 60- 20 / HCN 50- 20	0 - 60 kV, 0 - 20 mA	1.2 kW

Technical specification:
HSN / HCN

Output voltage, adjustable (10-turn pot)	0 - 100 %
Polarity of output voltage, fixed	pos. / neg.
Digital display of output voltage	0 - 100 %
Ripple	0.1% / 1% of FS
Stability of output voltage	0.1% / 1% of FS
Output current, adjustable (10-turn pot)	0 - 100 %
Digital display of output current	0 - 100 %
Display of preset value of voltage / current	key stroke
Display of regulating mode: voltage regulation /current regulation	signal lamp
High-voltage output	coaxial
HV-common output, potential free for can be connected to protective earth via	20 Veff contact element
Monitor outputs for voltage and current	0-10 V = 0-100%
Remote control for all functions	built-in
Analogue input for preset voltage, built-in	0-10 V = 0-100%
Analogue input for preset current, built-in	0-10 V = 0-100%
Supply voltage for external safety interlock and external red and green warning lights acc. to VDE 0104	24V-DC 230V/60W
Mains power supply voltage	230 V / 50 Hz
Dimensions:	19"-cabinet, 3/4 units 454*180*520 mm ³
Weight	15 - 35 kg

OPTION 1: Remote control via optically isolated computer interface
Otherwise remote control is accomplished by low-level signals,
the preset values for output voltage and output current are
inputted as analogue signals.

OPTION 2: Trigger module, built-in
Output voltage / Output current 500 V / 200 A