

HTS 20-10

High voltage test of components

0.2 up to 20 kV=; 10 mA

Rate of rise, adjustable:

100 V/s - 10 kV/s.

Limit current, adjustable,

Error message on over current

Current control in mode "current": 0.1-10mA



Figure: incl. option PA503

High-Voltage DC Test Sets HTS 20-10 are designed for testing dc dielectric strength of components, insulations, air- and surface flash-over gaps. Also for testing SPDs according to IEC 61643-1. The test voltage can be adjusted from 0.2 kV up to 20 kV.

The test voltage rises like a ramp from zero to the selected test voltage. The rate of rise can be adjusted from 100 V/sec up to 10000 V/sec. Then the test voltage remains at the selected value for the test time, which can be adjusted from 1 – 1000 sec. The actual test voltage is displayed. The test can be repeated several times. If the output current exceeds the limit value, which can be adjusted, the high-voltage power supply is switched off and an error message is generated: sound signal and display. If an over-current occurs during rise of voltage, the spark-over voltage is displayed.

In "current" mode, the test voltage increases in a ramp to the set current value. Then the generator regulates the current value and measures the voltage at the test object. The adjustment range of the current is from 0.1 - 10 mA.

The HV output terminals are located beyond a dielectric safety test cover with safety interlock. The transparent test cabinet prevents accidental contact with live parts of the test object and allows observation of the test object during testing.

It features a microprocessor controlled user interface and a 7" touch screen unit for ease of use. The microprocessor allows the user to execute either standard test routines or a "user defined" test sequence. A standard USB port provides the ability to print a summary of the test parameters to a USB stick.

The software program HTS-REMOTE allows full remote control of the test generator via Ethernet light guide as well as documentation and evaluation of test results, accordingly to the IEC 17025. To record definite impulses, it is equipped with an Impulse Recording Function (IRF) Moreover all generator functions may be computer controlled via the isolated optical interface.

The generator excels by its compact design, simple handling and precise reproducibility of test impulses.

Options	HTS 20-10
PROTECTIVE COVER ON THE EQUIPMENT TOP	
With safety interlock switch, connected to the safety interlock loop, red and green warning lamps installed acc. VDE 0104	See figure
Type PA 503, Dimensions W * H * D	400 * 140 * 300 mm ³
Type PA 505, Dimensions W * H * D	400 * 250 * 400 mm ³
Software HTS-REMOTE, for remote control	
With Impulse Recording Function (IRF) (XP, WIN7, WIN10) incl. 5m long light guide and PC Ethernet interface	

TECHNICAL SPECIFICATIONS	HTS 20-10
Mainframe:	
Microprocessor controlled touch panel	7", capacitive
Optical Ethernet Interface for remote control of the generator	Optional
Interface for saving reports	USB
External Trigger input/ output	Switch/ 10V
Connector for external safety interlock loop (not with Opt. 1)	24 V=
External red and green warning lamps	24 V=, 40 mA
Mains power	90V – 264V / 50/60 Hz
Dimensions of desk top case W * H * D	450*180*500 mm ³
Weight	25kg
High-Voltage Test Set Mode turn-off:	
Test voltage	0.2 - 20 kV(± 5%)
Measurement of test- /spark-over voltage/current, accuracy	± 5%
Voltage rate of rise, adjustable	100 V/sec-10 kV/sec
Test time, adjustable	1 - 1000 sec
Limit current, adjustable	0.1-10mA
Number of repetitions, adjustable	1 - 1000
High-Voltage Test Set Mode current:	
Regulated current	0.1 - 10 mA(± 5%)
Measurement of test- /spark-over voltage/current, accuracy	± 5%
Voltage rate of rise, adjustable	100 V/sec-10 kV/sec
Test time, adjustable	1 - 1000 sec
Number of repetitions, adjustable	1 - 1000
HV output terminals, on the top of the equipment	2 banana plugs, 4 mmØ