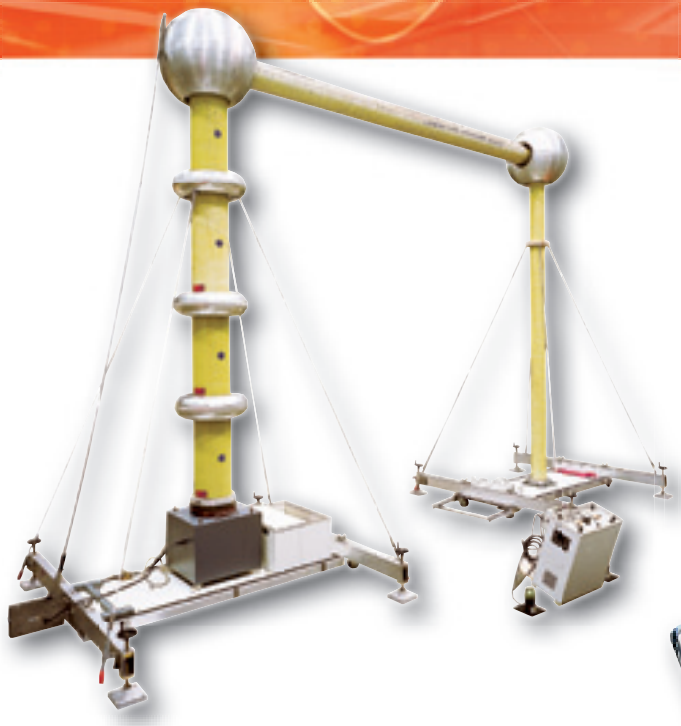
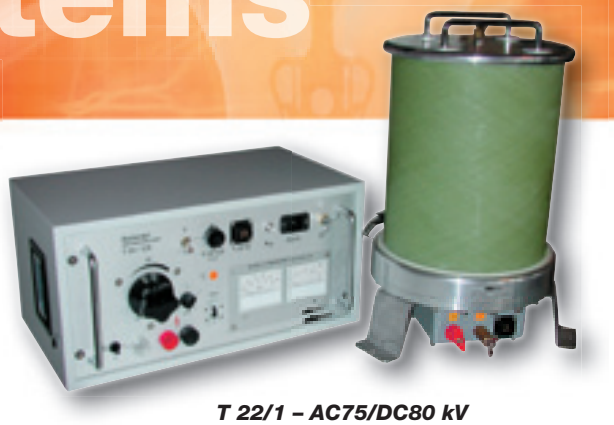
Portable high voltage test systems

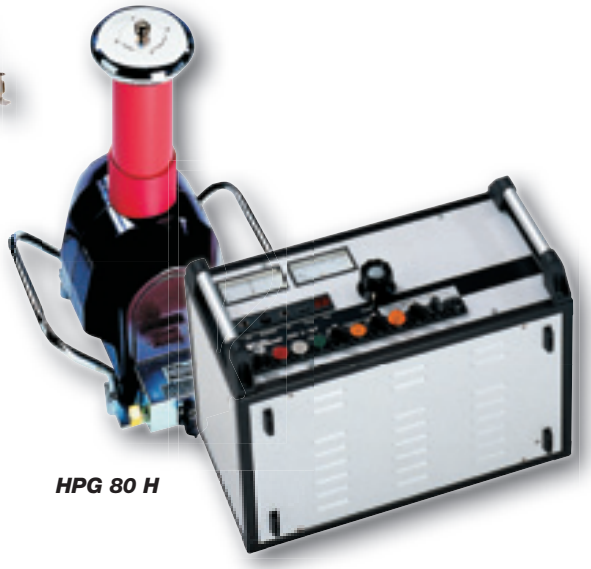
HV test systems



HVDC test system up to 800 kV DC



T 22/1 – AC75/DC80 kV



HPG 80 H

DC test systems from 0 ... ±800 kV and 50 Hz AC test systems from 0 ... 150 kV

- **For testing cables and their accessories as part of a commisioning test or after repair**
- **For testing electrical plant and switchgear**

sebaKMT

Transportable high voltage test systems for DC and AC testing

SebaKMT provides DC and AC voltage test devices for a very broad range of applications and voltages.

Portable test systems of up to 800 kV are available for testing of polymer and paper-insulated cables in compliance with VDE 0276, IEEE 400.2 and other internationally applicable standards.

DC testing of HVDC cables or systems is covered with the HVDC test system product range, ranging from 200 up to 800 kV. Another application of this portable and modular test system is testing of surge arresters.

AC test systems up to 150 kV_{RMS} are suitable for testing of electrical equipment with low capacity, e.g. insulation material and switchgears and other type of MV plant.

Application areas:

- Testing of cables and their accessories as part of a commisioning test or after repair
- For periodical testing as part of a maintenance program
- Testing of switchgear
- Testing of MV plant
- Testing of surge arresters

VLF CR 0.1 Hz test

A number of test devices can be enhanced with a VLF cosine-rectangular add-on. This allows a high-power test at 0.1 Hz and is particularly useful for installation in a test van and for testing of polymer insulated cables.

Sheath fault test

Aside from DC and sheath testing, the test systems BT 500-IS and MMG 10 can also be used for the precise pinpointing of sheath faults (in combination with a step-voltage probe) in the pulsed DC mode.

DC test systems up to 40 kV with automatic discharge and earthing

	BT 500-IS	MMG 10	HV Tester 25	T 99/1
DC output voltage	2 kV DC	10 kV DC	25 kV DC	40 kV DC
Output current	1 A @ 500 V 0.5 A @ 1,000 V 0.25 A @ 2,000 V	0.5 A @ 1 kV 0.1 A @ 5 KV 0.05 A @ 10 kV	1.5 mA	2.5 mA
Current measuring range	0 … 10 µA 0 … 1 mA 0 … 0.25/0.5/1 A	0 … 10 µA 0 … 1 mA 0 … 0.05/0.1/0.5 A	0 … 0.2 mA 0 … 2 mA	0 … 200 µA, 0 … 2 mA, 0 … 20 mA
Power consumption	700 VA	700 VA	120 VA	220 VA
Continuous duty cycle	Yes	Yes	Yes	Yes
Pulsed DC voltage for pinpointing sheath faults	Yes, with current limit	Yes, with current limit	-	-
Battery	-	-	Int. (approx. 45 min) and ext.	Ext.
Dimensions (W x H x D)	400 x 220 x 300 mm	360 x 200 x 360 mm	467 x 168 x 284 mm	160 x 260 x 400 mm
Weight	9 kg	9 kg	13.5 kg	15 kg
Input voltage	230 V AC, 45 … 60 Hz	230 V AC, 45 … 60 Hz	115/230 V AC, 50/60 Hz, int. battery and 12 V DC ext.	230 V AC, 50 Hz and 12 V DC ext.

BT 500-IS

MMG 10

HV Tester 25

T 99/1

AC 50 Hz/DC test systems up to 150 kV_{RMS} manual discharge and earthing

50 kV ... 80 kV DC:

	HV test set, 50 kV	HPG 50-H	HPG 70-K	HPG 80-H	HV test set, 80 kV	T22/1
DC output voltage	0 … 50 kV DC	0 … 50 kV DC	0 … 70 kV DC	0 … 80 kV DC	0 … 80 kV DC	0 … 80 kV DC (with opt. rectifier)
AC output voltage	-	0 … 35 kV AC	-	0 … 58 kV AC	-	0 … 75 kV AC 0 … 150 kV AC (with two trans-formers)
Output current I_n	6 mA	15 mA	10 mA	15 mA	5 mA	13 mA
Short-time current I_k (1 h)	-	50 mA	-	50 mA	-	50 mA (1 min.)
Power consumption P_n	0.9 kVA	1.2 kVA	0.7 kVA	1.2 kVA	0.9 kVA	1 kVA
Power consumption, short-time P_k (1 h)	-	3.0 kVA	-	2.5 kVA	-	4 kVA (1 min.)
VLF CR 0.1 Hz expandable	-	50 kV VLF CR	54 kV VLF CR	54 kV VLF CR	-	-
Dimensions (W x H x D) Control panel	400 x 335 x 200 mm	520 x 255 x 320 mm	520 x 255 x 320 mm	520 x 255 x 320 mm	400 x 335 x 200 mm	551 x 255 x 380 mm
Dimensions (W x H x D) High-voltage unit	214 x 460 x 236 mm	225 x 740 x 380 mm	320 x 255 x 255 mm	440 x 800 x 485 mm	214 x 560 x 236 mm	∅ 560, H 420 mm
Weight	13 kg + 17 kg	26 kg + 48 kg	18 kg + 21 kg	26 kg + 76 kg	13 kg + 18.5 kg	19 kg + 29 kg
Input voltage	230 V AC, 50 Hz*	230 V AC, 50 / 60 Hz	230 V AC, 50 / 60 Hz	230 V AC, 50 / 60 Hz	230 V AC, 50 Hz*	230 V AC, 50 / 60 Hz

HV test set 50/80/110 kV

HPA 100 AC
HPA 130 DC

HPG 50-D

HPG 70-K

100 kV ... 130 kV DC:

	HPG 50-D	HV test set 110 kV	HPG 80-D	HPG 110-H	HPA 100 AC HPA 130 DC
DC output voltage	0 … 100 kV DC	0 … 110 kV DC	0 … 150 kV DC**	0 … 110 kV DC	0 … 130 kV DC (with opt. rectifier)
AC output voltage	0 … 35 kV AC	-	0 … 58 kV AC	0 … 78 kV AC	0 … 100 kV AC
Output current I_n	15 mA	4 mA	15 mA	15 mA	50 mA (AC)
Short-time current I_k (1 h)	50 mA	-	50 mA	50 mA	75 mA (AC)
Power consumption P_n	1.2 kVA	0.9 kVA	1.2 kVA	1.5 kVA	5 kVA
Power consumption short-time P_k(1 h)	3.0 kVA	-	2.5 kVA	3.5 kVA	7.5 kVA
VLF 0.1 Hz expandable	54 kV VLF CR	-	54 kV VLF CR	54 kV VLF CR	-
Dimensions (W x H x D) Control panel	520 x 255 x 320 mm	400 x 335 x 200 mm	520 x 255 x 320 mm	434 x 560 x 520 mm	520 x 430 x 465 mm
Dimensions (W x H x D) High-voltage unit	900 x 1065 x 450 mm	214 x 670 x 236 mm	1000 x 1065 x 490 mm	310 x 720 x 310 mm	∅ 670, H 1,110 mm
Weight	26 kg + 94 kg	13 kg + 20 kg	26 kg + 124 kg	108 kg + 95 kg	75 kg + 225 kg
Input voltage	230 V AC, 50/60 Hz	230 V AC, 50 Hz*	230 V AC, 50/60 Hz	230 V AC, 50/60 Hz	230 V AC, 50/60 Hz

* also available in 115 V 60 Hz, **Test van integration, voltage limited to 130 kV

Portable and modular DC test systems up to 800 kV

The high-voltage test systems are high-performance and transportable systems for high-voltage testing of cables, cable systems and installations with DC voltages of up to 800 kV, in compliance with the applicable regulations (VDE).

The systems are suitable both for mobile use, e.g. in measuring trailers, and for on-site tests as a stationary test system. The spatial segregation of the operating panel and the high-voltage unit allows the systems to be operated from outside the direct area of risk. The modular structure facilitates the set-up of systems on site, and allows them to be individually adaptated to the measuring tasks.

The systems are predominantly used by power supply companies, service providers, cable installers and cable manufacturers for testing DC voltage on high-voltage systems and cables. Moreover the systems can also be applied for surge arrester testing or transformer testing.

The short-circuit-proof output circuit and high power enable their use during fault location as a burner for burning in high-impedance and intermittent cable faults.

Accessories

- Transport trailer
- Transport boxes

	HVDC 200	HVDC 350	HVDC 400	HVDC 650	HVDC 800
DC output voltage*	0 … -200 kV	0 … -350 kV	0 … -400 kV	0 … -650 kV	0 … -800 kV
Output current	9 mA @ 190 kV	5.5 mA @ 300 kV	4 mA @ 350 kV	3.5 mA @ 600 kV	2 mA @ 800 kV
Short-circuit current I_k	300 mA ±10%	300 mA ±10%	300 mA ±10%	290 mA ±10%	55 mA ±10%
Distortion factor	< 3 %				
Voltage range	0 … 240 kV	0 … 360 kV	0 … 480 kV	0 … 720 kV	0 … 960 kV
Measuring accuracy	±3 %				
Current range	0.1/ 1/ 10/ 100 mA with automatic switchover, 300 mA fixed setting				
Measuring accuracy	±3 %				
Overcurrent protection	0.1/ 1/ 10 mA selectable				
Timer	0 … 60 min				
Max. discharge energy	600 kJ @ 200 kV	600 kJ @ 350 kV	600 kJ @ 400 kV	1,600 kJ @ 600 kV	2,000 kJ @ 800 kV
Input voltage	220 … 240 V, 50 / 60 Hz				
Power consumption P_{max}	4 kVA (16 A fused)			5.5 kVA (25 A fused)	

* positive polarity available on request

Our range of products: Equipment and systems to locate faults in power and communications networks, as well as for leak location on pipe networks · line location equipment · CCTV inspection · seminars · service · contracting.

Technical data subject to change without notice.

ISO 9001:2008

For more information, see:
www.sebakmt.com

SebaKMT
Dr.-Herbert-Iann-Str. 6
96148 Baunach/Germany
Tel. +49(0) 95 44 - 6 80
Fax +49(0) 95 44 - 22 73
sales@sebakmt.com
www.sebakmt.com

sebaKMT