

axos⁵ EXPANDABLE TEST SYSTEM

SURGE TEST SYSTEM



SURGE



EFT / BURST



VOLTAGE DIPS



MAGNETIC FIELD



www.axos.haefely.com

SUMMARY

The AXOS⁵ Surge Test System is a state of the art stand-alone Surge Combination Wave 1.2/50µs...8/20µs impulse generator. Created after the successful AXOS⁵ Compact Immunity Test System, the AXOS⁵ Surge Test System incorporates all the best features of our well-known and proven PSURGE-series with the addition of a new touch screen interface for superior functionality. It is both cost-effective and fully compliant with the IEC/EN 61000-4-5 standards. It also comes equipped with all the hardware needed for instant upgrades with optional key codes. These key codes can be entered with ease to expand the test capabilities of the AXOS⁵ Surge Test System, including EFT/Burst and AC/DC Dips Interrupts.

Furthermore, it has a built-in 16A single phase coupling/decoupling network (CDN) which can be expanded to a three phase system with 100A as well. In addition, HAEFELY EMC offers a wide range of accessories for waveform verification and test applications. The flexibility provided by our accessories insures a safe investment for the future.

FEATURES & BENEFITS

- Easy to operate with manual and automated test modes, software assisted test preparation, predefined test routines and visual aided test setups
- The sensitive touch screen guarantees reduction of time and effort at a reasonable price
- Voltage and current monitoring of Surge impulses and EUT power provides valuable feedback to the test engineer
- Automatic generation of test report, including test parameters, test setup and test result

APPLICATIONS

- Compliance and pre-compliance testing of electrical products
- CE marking
- Product development and debugging
- Compliance testing of telecom and wireless devices

STANDARDS

- IEC 61000-4-5 Edition 2
- Upcoming IEC 61000-4-5 Edition 3
- EN 61000-6-1, -6-2
- IEC 61000-4-9*
- IEC 61326
- ITU-T K.20
- ITU-T K.21
- ITU-T K.41
- ITU-T K.45

INDUSTRIES

- Industrial
- Residential
- Components
- Medical
- Renewable energy
- Telecom

*optional MSURGE-A required

TECHNICAL SPECIFICATIONS

GENERAL DATA			
Control power	85 V - 264 V 50/60 Hz	Dimensions (W x H x D)	19" / 4U (45 x 18 x 49 cm)
User test storage	unlimited	Weight	25 kg
Remote interface	Ethernet, RJ45	USB	for USB memory stick
Display	7" / 800x480 / 24 bit with touch-screen	AUX. interface	D-sub 37p for external CDN, external trans- former etc.
External trigger input	5 VTTL	Synch input	BNC, 10 V – 264 V AC
Trigger output	5 VTTL	External start / stop input	5 VTTL, starts / stops predefined test sequence
EUT failed input	5 VTTL	Analog output	0 – 10 V, for use with external options
Warning lamp output	2 x 24 V / 1 A DC	Safety circuit	stops the test when unlocked
IEC / EN 61000-4-5 EDITION 2 & UPCOMING EDITION 3			
Output voltage	0.2 – 5.0 kV $\pm 10\%$	Output current	0.1 – 2.5 kA $\pm 10\%$
Voltage rise time	1.2 μ s $\pm 30\%$	Current rise time	8 μ s $\pm 20\%$
Voltage duration	50 μ s $\pm 20\%$	Current duration	20 μ s $\pm 20\%$
Polarity	pos / neg / alternate	Integrated single phase CDN	264 V AC / 16 A 220 V DC / 10 A
Output impedance	2 Ohms	Impulse trigger	automatic 2 s – 100 min manual external trigger input
Phase sync	0 – 359° with 1° steps or asynchronous mode	Peak current monitor	BNC output: 1 kA/V display: 3 digits
Counter preselect	1 – 1000 / infinite		
Counter	100000		
Peak voltage monitor	BNC output: 1000:1 display: 3 digits		

OPTIONS AND ACCESSORIES

FP-SURGE100M2	Manual 3-phase / 100A Surge Combination Wave	2490180
MSURGE-A	Antenna Coil for Magnetic Field Test IEC/EN 61000-4-9	2490441
VTM 15000	Isolation Test 1.2/50 μ s up to 10 kV	2499960
VTM 15000/05	Voltage transformer multiplier 0.5 Joule	2499692
Calibration	Accredited calibration for AXOS ⁵ Surge Test System	2490420
Remote Control	Remote Control Software	2490440
Key Code EFT/Burst	Key Code for upgrade to EFT/Burst	4700815
Key Code Dips	Key Code for upgrade to AC/DC Dips and Interrupts	4700816



Headquarters

Haefely Test AG
Birsstrasse 300
4052 Basel
Switzerland

☎ + 41 61 373 41 11
☎ + 41 61 373 49 12
✉ emcsales@haefely.com

China (Sales & Service Office)

HAEFELY Representative Office
8-1-602, Fortune Street
No.67, Chaoyang Road, Chaoyang District
Beijing, China 100025

☎ +86 10 8578 8099
☎ +86 10 8578 9908
✉ sales@haefely.com.cn

North American Office

Hipotronics Inc.
Haefely EMC Division
1650 Route 22
Brewster, NY 10509

☎ +1 845 279 3644
☎ +1 845 279 2467
✉ emcsales@hubbell-haefely.com