

axos 5

COMPACT IMMUNITY TEST SYSTEM



SURGE



EFT / BURST



VOLTAGE DIPS



MAGNETIC FIELD



www.axos.haefely.com



SUMMARY

COMPACT IMMUNITY TEST SYSTEM

The new AXOS⁵ compact immunity test system integrates all of the best features of our stand alone test systems into one single economic solution.

It combines 5 kV Burst/EFT, Surge combination wave, AC/DC Dips & Interrupts, along with an integrated single-phase coupling / decoupling network into one compact test system.

This allows quick and completely automated testing to the most common IEC, EN, ANSI, IEEE and UL standards.

AXOS⁵ can either be operated via front panel by large colour graphic interface or remotely from the PC.

The easy to use menu together with the availability of predefined test routines for different standards makes testing easy and reliable, even for less frequently users.

Numerous additional functions such as external start/stop function allows easy integration of the test system also in customer specific test environments.

All the test parameters can be varied in a broad range wide above the requirements of the standards. Together with the ability of changing test parameters during test, AXOS⁵ is not only the ideal product for compliance and pre-compliance testing, it is useful for monitoring & debugging function during design phase as well.

A wide range of cost-efficient and user friendly coupling / decoupling networks for power lines as well as for symmetrical and asymmetrical data- and signal lines are available as options.

OVERVIEW

FEATURES & BENEFITS

- Easy to operate with manual and automated test modes, software assisted test preparation, pre-defined test routines and visual aided test setups
- Economic & Efficient
Touch screen guarantees reduction of time and effort - Experience and know-how at a reasonable price
- Safe and reliable operation by using safety interlock, warning lamp and emergency stop functions
- 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 & pre-compliance testing of electrical products
- CE marking
- Product development and debugging
- Compliance testing of telecom and wireless devices

STANDARDS

- IEC/EN 61000-4-4 EFT / Burst
- IEC/EN 61000-4-5 Surge
- IEC/EN 61000-4-9 Imp Magnetic Field
- IEC/EN 61000-4-11 AC Dip and Interrupt
- IEC/EN 61000-4-29 DC Dip and Interrupt
- IEC/EN 61000-6-1 Generic Residential
- IEC/EN 61000-6-2 Generic Industrial
- IEC/EN 60335-1 Household
- IEC/EN 60601-1 Medical
- and many more

INDUSTRIES

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

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	30 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 transformer 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

ICE / EN 61000-4-4 EDITION 2 EFT / BURST			
Output voltage	0.2 – 5.0 kV $\pm 10\%$ at co- axial output	Spike frequency	1 Hz – 1 MHz
Polarity	pos / neg / alternate	Burst duration	10 μ s – 1 s
Output impedance	50 Ohms	Burst period	1 ms – 10 s
Rise time	5 ns $\pm 30\%$	Test time	1 s– 999 minutes
Impulse duration	50 ns $\pm 30\%$ at 50 Ohm 50 ns –15 +100 ns at 1000 Ohm	Trigger	automatic, manual, external trigger input
Burst mode	normal, continuous, real, random	Integrated single phase coupling / decoupling network	264 V AC / 16 A 220 V DC / 10 A

ICE / EN 61000-4-5 EDITION 2 SURGE COMBINATION WAVE

Output voltage	0.2 – 5.0 kV $\pm 10\%$	Output current	0.1 – 2.5 kA $\pm 10\%$
Voltage rise time	1.2 μs $\pm 30\%$	Current rise time	8 μs $\pm 20\%$
Voltage duration	50 μs $\pm 20\%$	Current duration	20 μs $\pm 20\%$
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 5 s – 99999 s manual external trigger input
Phase synch	0 – 359° with 1° steps or asynchronous mode	Peak current monitor	BNC output: 1 kA/V display: 3 digits
Counter preselect counter	1 – 10000 / infinite 100000		
Peak voltage monitor	BNC output: 1000:1 display: 3 digits		

IEC / EN 61000-4-11 EDITION 2 AND IEC / EN 61000-4-29 DIPS & INTERRUPTS

Max. voltage	264 V AC/DC	Interrupt time	0.1 period – 9999 periods 0.02 ms – 999 minutes
Max. current	16 A AC/DC continuous 20 A for 5 s 40 A for 3 s 500 A inrush current	Interval time	1 period – 9999 periods synch 0.04 ms – 999 minutes asynch
Trigger	automatic manual external trigger input	Test time	1 s – 999 minutes infinite
Interrupt dip level	0% 0% – 99% with external voltage source	Phase synch	0 – 359° 16 / 40 / 50 / 60 Hz asynchronous mode
RMS voltage monitor	BNC output: 100:1 display: 4 digits	RMS current monitor	BNC output: 10 A/V display: 4 digits

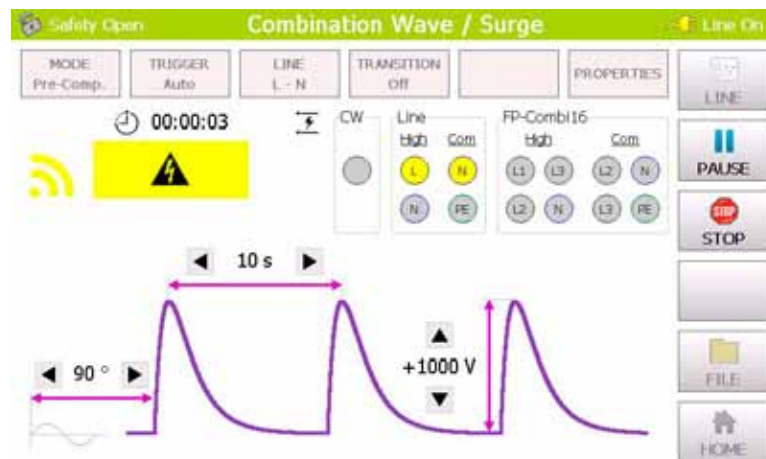
SCOPE OF SUPPLY – OPTIONS & ACCESSORIES

SCOPE OF SUPPLY AXOS⁵		2490400
Qty. 1	Immunity Test System AXOS ⁵	
Qty. 1	Mains Cable 10 A	
Qty. 1	EUT Power Cable 16 A	
Qty. 1	EUT Power Adapter	
Qty. 1	User Manual	
Qty. 1	Certificate of Calibration	
OPTIONS AND ACCESSORIES		
FP-COMB 32	3-Phase / 32 A Power Line CDN Surge & EFT	2490430
FP-EFT 100 M2	3-Phase / 100 A Power Line CDN EFT	2495860
IP4A	Capacitive coupling clamp for EFT	2491300
FP-SURGE 100 M2	3-Phase / 100 A Power Line CDN SURGE	2490181
PCD 121	Symmetrical Data & Control Line Coupler	2498010
PCD 126 A	Asymmetrical Data & Control Line Coupler	2498030
DEC 5	Symmetrical Data & Control Line Decoupler	2490141
DEC 6	Symmetrical Data & Control Line Decoupler	2490151
DEC 7	Asymmetrical Data & Control Line Decoupler	2490161
DIP 116	Automatic Dips Transformer 16 A 40/70/80%	2490410
MSURGE	Magnetic Field Test IEC / EN 61000-4-9	2495591
VTM 15000	Isolation Test 1.2/50 us up to 10 kV	2499960
PDP 8000	HV differential Probe 1000:1 for Surge	2499911
CP 101	Current Probe Model for Surge	2499931
ES	External emergency stop Switch P12	4700751
WL	External warning Lamp P12	4700750
WinFEAT'R	Control, Measurement & Reporting Software	2499701
Calibration	Accredited Calibration AXOS ⁵	2490420

AXOS – PERFECTION. DELIVERED.

FEATURES

- 7" / 800 x 480 / 24 bit touch-screen
- Reduction of daily working effort due to easy access menu structure
- Intuitive menu prompting
- Multilingual menus (English, German, French)
- Ethernet and USB connectivity





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