



**ON4X**



**ELECTROSTATIC DISCHARGE  
SIMULATOR**



**HAEFELY**

Current and voltage – our passion



## SUMMARY

The ONYX is a state of the art electrostatic discharge simulator available in 16 kV or 30 kV versions. It is the most

ergonomic ESD simulator without any additional base control unit that can be battery or mains operated. The easy

to use touch screen, ergonomic design, modular RC units, multilingual interface, remote control software, built-in

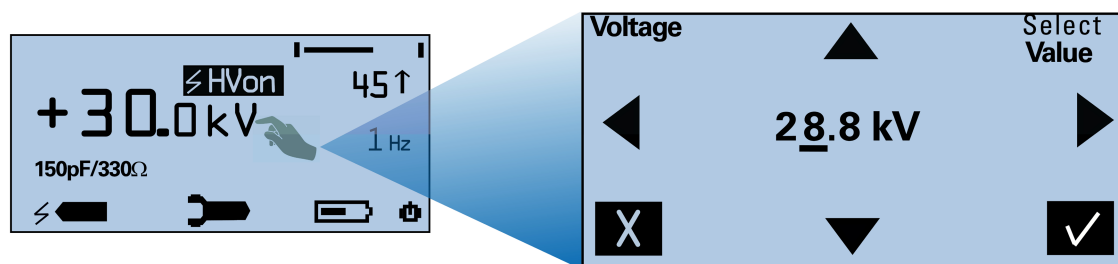
LED light and temperature & humidity display allows for trouble-free use of the ONYX in all types of test sites. The

ONYX also includes a bleeder resistor which is connected in parallel with the output of the high-voltage power

supply circuit. This ensures that the high voltage power supply is completely discharged after each injected pulse to an EUT or if the ESD simulator itself will be turned-off by the user (bleed-off).

The smart key button, integrated into the trigger button has various functions that can be defined by the user including polarity switching, LED light, counter reset, voltage stepping up/down and others.

The ONYX also features a unique selftest which verifies all of the main components of the unit are working correctly. This ensures that accurate and reliable tests are performed every time the gun is used.



## FEATURES

- User defined 'smart key' function
- Touch screen interface
- Predefined tests according to standards
- Multilingual
- Define, store and load tests
- Ergonomic all-in-one design (no base unit) and ONYX balancer (optional)
- Automatic polarity switching
- User changeable RC networks
- Remote control software
- Battery or mains operation, long battery life



## ADVANTAGES

- ✓ Flexibility enables users to meet many different test specifications with maximum cost effectiveness.
- ✓ Quick and simple one touch operation and simple on screen menu structure.
- ✓ the most ergonomic 30kV ESD gun on the market without an external base control unit. The balancer (optional) reduces operator fatigue and repetitive motion injuries
- ✓ Tests according diferente standards, or specific requiremenst, can be done with one single ONYX.
- ✓ Computer can be connected and used to control the ONYX, doing reports and collect measurement is done in seconds.
- ✓ Tests are posible even if no mains is available, no need to wait ti battery charging to continue.

## APPLICATIONS

Full-compliance and pre-compliance testing to a wide variety of standards:

- IEC/EN 61000-4-2 Edition 2 (2009)
- IEC/EN 61326
- IEC/EN 61000-6-1 & -6-2
- IEC 61340-3-1
- IEC/EN 60601-1
- ISO 10605
- GMW 3097
- Ford AB/AC
- ANSI C63.16
- PSA B21 7110
- ISO 14304
- ITU-T K.20
- MIL-STD-331 / -464 / -883 / -1512 /-1514 / -1541 / -1542
- RTCA/DO-160
- JEDEC 22-A114
- GR-78-CORE
- GR-1089-CORE
- and others



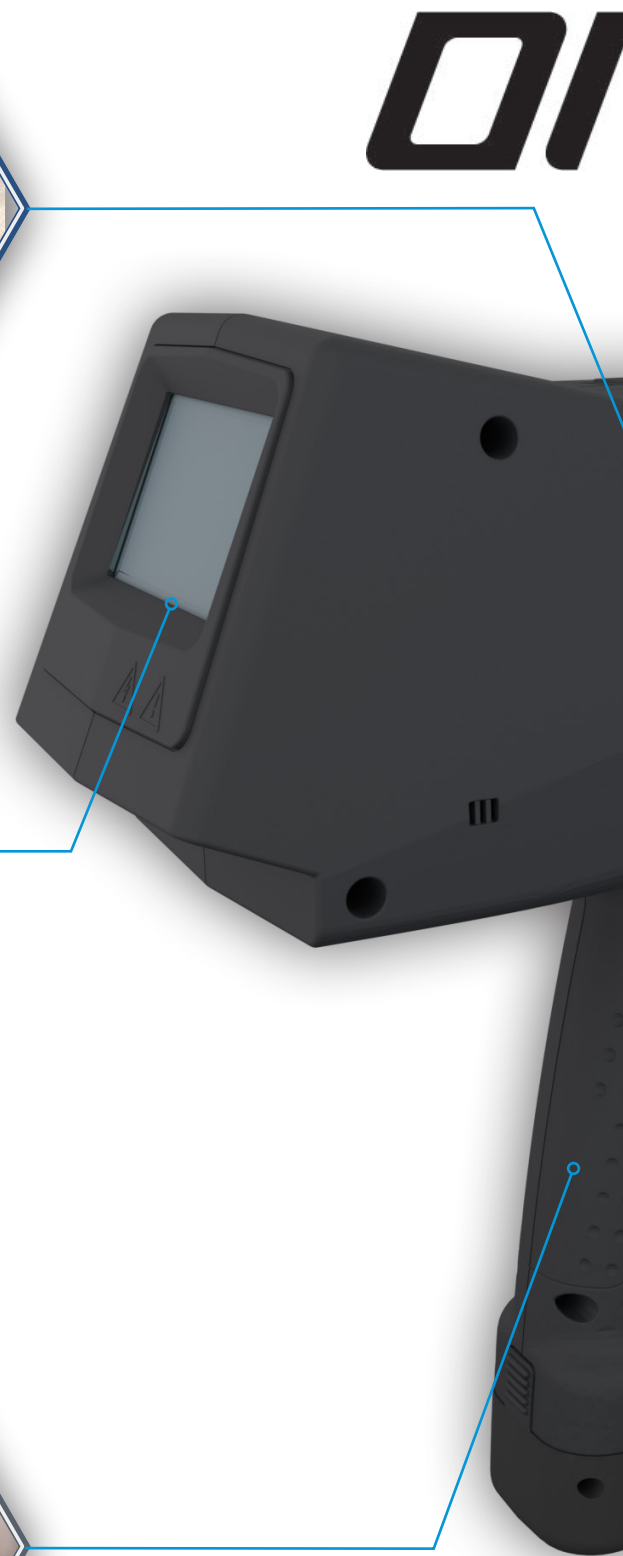
**Modular**  
Exchangeable RC's for  
different standards



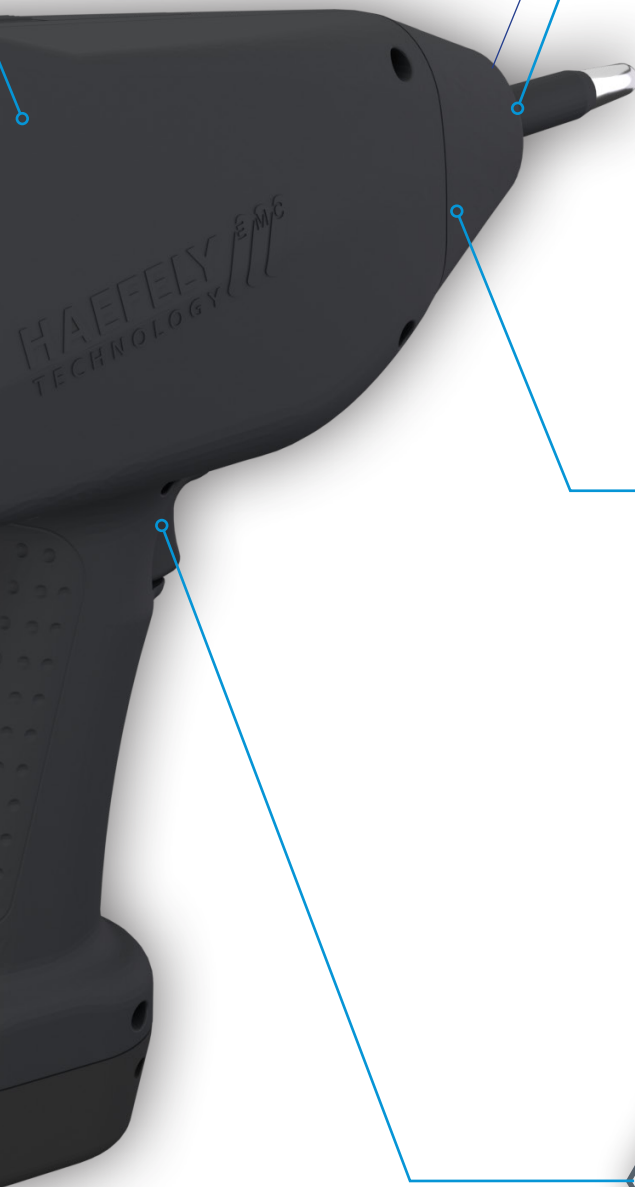
**Touch pannel**  
Self explain operation



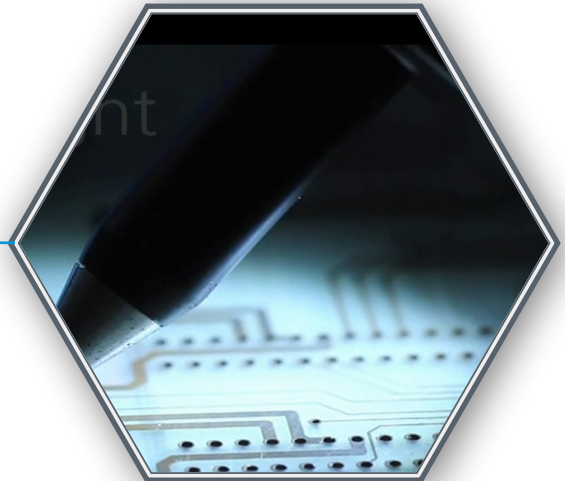
**Ergonomic**  
Light and easy to handle,  
no base unit or cables.



# 74X



**Interchangeable tips**  
For better impulse



**Led light**  
Perform the test in the exact point



**Smart Key**  
To be configure for actions





## STANDARD PACKAGE

### ONYX

ONYX 16	ESD Simulator 16 kV	No. 2499980
ONYX 30	ESD Simulator 30 kV	No. 2499982

### Included accessories

- Carrying case
- test tip contact discharge
- 2 rechargeable battery packs
- ground cable
- battery charger unit incl. country-specific mains plugs
- R/C module 150 pF/330  $\Omega$  according to IEC 61000-4-2
- quick start guide, manual on CD, calibration certificate



## ONYX SPECIFICATIONS

	ONYX 16	ONYX 30
Air discharge voltage	1 .. 16 kV	1 .. 30 kV
Cont. discharge voltage	1 .. 16 kV	1 .. 30 kV
Discharge repetition	single/0.1/0.2/0.5/1/2/5/10/20 Hz	
Discharge counter	1 .. 9999	
Default R/C – network	150 pF / 330 $\Omega$	
Dimensions W x H x D	290 x 270 x 110 mm	
Voltage resolution	100 V steps	
Discharge polarity	positive & negative	
Operating modes	single & continuous	
Battery life	> 16 hrs	
Power consumption	17 VA	
Weight	1.7 kg	

