



ONYX

IT ISO TEST
Instrumentación Electrónica y Metrología

Electrostatic Discharge ESD Simulator



■ The **ONYX** is a state of the art electrostatic discharge simulator available in 16kV or 30kV versions. It is the most ergonomic 30kV ESD gun **without an 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 **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 **self test** 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.

■ See more details at www.haefely-onyx.com

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
 - ☑ ISO 10605
 - ☑ GMW 3097
 - ☑ Ford AB/AC
 - ☑ ANSI C63.16
 - ☑ PSA B21 7110
 - ☑ ISO 14304
 - ☑ ITU-T K.20
 - ☑ MIL-STD-331/-464/-750/-883/-1512/-1514/-1541/-1542
 - ☑ RTCA/DO-160
 - ☑ JEDEC 22-A114
 - ☑ GR-78-CORE
 - ☑ GR-1089-CORE
- and others

BENEFITS

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.

Mobility – the most ergonomic 30kV ESD gun on the market without an external base control unit.

Reliable and economical – A Swiss made product, reliability, service and support in a budget-friendly package.

FEATURES

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

a brand of

HAEFELY

precision.
swiss made.

EMC
WARRANTY
2 YEARS

Haefely is a subsidiary
of Hubbell Incorporated.



TECHNICAL SPECIFICATIONS

Air Discharge Voltage	1 .. 16kV or 1 .. 30kV
Cont. Discharge Voltage	1 .. 16kV or 1 .. 30kV
Discharge Repetition	Single/0.1/0.2/0.5/1/2/5/10/20Hz
Discharge Counter	1 .. 9999
Default R/C – Network	150pF / 330Ω
Dimensions W x H x D	290 x 270 x 110mm

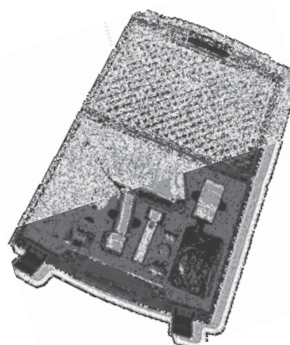
Voltage Resolution	100V steps
Discharge Polarity	Positive & Negative
Operating Modes	Single & Continuous
Battery Life	> 16hrs
Power Consumption	17VA
Weight	1.7kg

SCOPE OF SUPPLY

ONYX ESD simulator carrying case including:
 Test tip air discharge, Test tip contact discharge, 2 rechargeable battery packs, Ground cable, Battery charger unit incl. mains adaptor set, R/C module 150pF/330Ω acc. IEC 61000-4-2, Quick start guide, Manual on CD, Calibration certificate

ONYX 30 Order code 2499982

ONYX 16 Order code 2499980



OPTIONS AND ACCESSORIES

R/C Modules



Pulse shape forming modules:
 2490204 150pF / 2kΩ (ISO 10605)
 2490205 330pF / 2kΩ (ISO 10605)
 2490206 330pF / 330Ω (ISO 10605)
 2490207 100pF / 1.5kΩ
 2490208 150pF / 150 Ω
 2490209 500pF / 500 Ω
 2490210 500pF / 5kΩ
 2490211 50pF .. 1nF / 50Ω .. 5kΩ (custom)

30kV AD Tip 2490212



Discharge tip 30mm diameter for improved air discharge testing up to 30kV

Accredited Calibration 2499981

Accredited calibration according to ISO/IEC 17025 requirements

Mains Adaptor 2490214

Power supply replaces the rechargeable battery pack for continuous testing

Remote Control 2490216

Package of fibre optical RS 232 interface and control & report software

Verification Set 2499971



For wave shape verification according to IEC/EN 61000-4-2
 Including:
 2Ω Target/ 4GHz
 Attenuators
 Coax cable
 User manual

Fast Rise Time Tip 2490213



Reduces the rise time of the ESD-pulse to 0.3ns for reliability testing

HCP 2496881

Horizontal Coupling Plane 1.6m x 0.8m for indirect application of the ESD. Includes cable with 2 integrated 470kΩ HV-resistors

VCP 2495581

Vertical Coupling Plane 0.5m x 0.5m, for indirect application of the ESD. Includes cable with 2 integrated 470kΩ HV-resistors

Test Table 2496871

Table 160 x 80cm, made of wood without any metallic parts, as required by IEC 61000-4-2

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