



ONYX

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.

High Voltage
Test Systems

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)

Verification Set

2499971



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

30kV AD Tip

2490212



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

Fast Rise Time Tip

2490213



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

Accredited Calibration

2499981

Accredited calibration according to ISO/IEC 17025 requirements

HCP

2496881

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

Mains Adaptor

2490214

Power supply replaces the rechargeable battery pack for continuous testing

VCP

2495581

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

Remote Control

2490216

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

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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