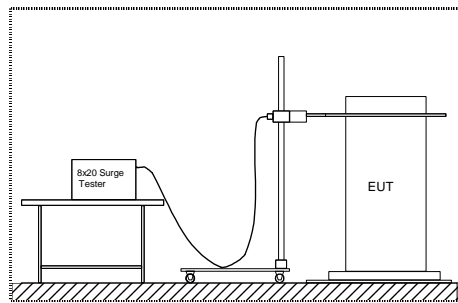


# MSURGE

Magnetic Impulse Field Test System



MSURGE 1mx1m antenna mounted on support stand shown with a monitor as EUT (right) and a PSURGE6 as impulse generator (left)



EUT setup

## FEATURES

- up to 3000A/m field strength
- standard coil designed for major application as defined in the IEC document
- sturdy construction
- horizontal and vertical testing possible
- supplied to ISO 9001

The magnetic field test set MSURGE consists of the magnetic coil and the connecting cables to the current surge generator.

To be used for EMC Tests requiring impulse Magnetic Fields.

The MSURGE is an accessory to either the PSURGE 4010 or PSURGE 8000 with PIM 100 surge generators. It enables magnetic field testing up to 3000 A/m as required by IEC 61000-4-9.

The support stand can also be used for tests in accordance with IEC 61000-4-8 and IEC 61000-4-10

## ONE SOLUTION

for

- IEC 61000-4-9
- EN 61000-4-9

all EN product standards and many other applications.

## BENEFITS

- software control (when used together with Haefely EMC Surge Testers)
- single turn coils
- only one support stand is needed for all magnetic field tests in accordance with IEC 61000-4-8/9/10
- the portable support stand for the coil is adaptable for all three magnetic field tests.

## MSURGE

MSURGE has a 1m x 1m square, single turn antenna. A current of 3600A is needed to feed the coil to produce a field of 3000A/m.

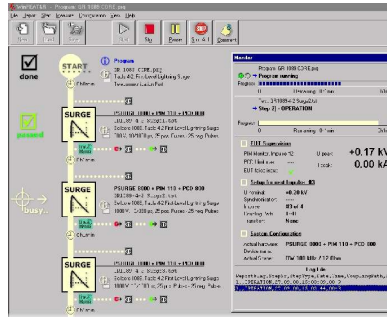


Magnetic field strength is defined at the center of a coil with  $\pm 3\text{dB}$  variation. Magnetic field is orthogonal to the coil plane. Coil dimensions define the maximum EUT size as being 0.6m x 0.6m x 0.5m. The MSURGE can be used for both vertical and horizontal plane testing, by simply rotating the coil antenna in its mounting on the (optional) stand.

## AUTOMATIC TESTING

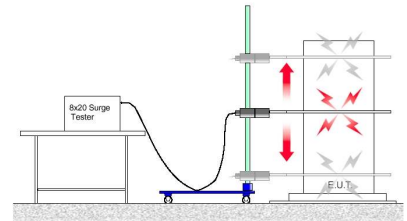
In conjunction with other Haefely EMC Test products, magnetic field testing can be fully or partially automated. Any Surge generator can be used together with the MSURGE to provide semi-automatic testing from the instrument front panel. Voltages can be programmed which correspond to a magnetic field strength at the center of the coil antenna.

WinFEAT&R software used to control the Surge generators, means that impulse magnetic field testing can be semiautomatic with other EMC tests.



## LARGE EUTS

The MSURGE is designed for EUTs up to 0.5m high. To test larger EUTs, the antenna coil can be adjusted in height on the mounting stand. The MSURGE construction makes it easy to adjust the antenna height.



The MSURGE antenna can also be rotated through 90° and placed alongside large EUTs to test all four faces of the test object.

## TECHNICAL SPECIFICATION

Impulse wave shape Input to the magnetic coil	8/20 $\mu\text{s}$	Maximum EUT size	0.6 x 0.6 x 0.5m
Maximum current	3700 A	Load	100 m $\Omega$
Input magnetic coil Magnetic field	A current of 1200 A correspond to 1000 A/m in the center of the coil	Input	High voltage cables with coaxial plugs
Support stand	520 x 800 x 2'050 mm (W x D x H)	Weight	approx. 14 kg

## ORDERING INFORMATION

MSURGE (1x1m coil antenna)	249 559
Support stand for coil antenna	249 003
WinFEAT&R software	249 970

Headquarters  
**Haefely Test AG**  
 Lehenmattstrasse 353  
 CH-4052, Basel  
 Switzerland

+ 41 61 373 41 11  
 + 41 61 373 45 99  
[EMC-sales@haefely.com](mailto:EMC-sales@haefely.com)

Locate your local  
 sales representative at  
[www.haefelyEMC.com](http://www.haefelyEMC.com)



**HAEFELY** EMC  
 TECHNOLOGY

North American Office  
**Hipotronics Inc.**  
**Haefely EMC Division**  
 1650 Route 22  
 Brewster, NY 10509

+1 845 279 3644 x264  
 +1 845 279 2467  
[EMCsales@hubbell-haefely.com](mailto:EMCsales@hubbell-haefely.com)