

# FP-EFT 100M2

## 3 Phase Coupling / Decoupling Network for EFT / Burst

■ **IEC / EN and ANSI** standards cover burst testing of single and three phase AC and DC power ports. They include recommendations for the test equipment, the test set-ups and the test procedures. The IEC 61000-4-4 Edition 2: 2004 now defines the impulse shape not only at the generator output but also at the CDN output.

This Edition 2 requires a pure common mode coupling only. This means that the burst signals are coupled simultaneously into all paths at the same time. Because of this no coupling path selection during testing is necessary. This speeds up the test time.

The FP-EFT 100M2 couples the burst into an EUT while preventing the impulses from polluting the three phase power supply.

The FP-EFT 100M2 has manual coupling path selection to verify the functionality of each path as recommended in the IEC 61000-4-4 Edition 2: 2004. This can also be used to select different coupling paths according to ANSI standards which requires a path by path burst test.

Used together with the PEFT 4010, PEFT Junior or PEFT.1 generators, the FP-EFT 100M2 can be used to inject EFT/burst impulses on the three phase supply.

With a 100 year history of innovation, service centers on three continents and a full staff development and support engineers, Haefely is the clear choice for all your transient immunity test needs.



### ■ Features

- ☑ **5/50ns** impulse shape
- ☑ **8kV** impulse voltage
- ☑ manual **coupling path selection**
- ☑ **690Vac** phase-phase  
**400Vac** phase-neutral
- ☑ **100A** per phase EUT Current
- ☑ **Phase angle** synchronisation possible

### ■ Benefits

**International application** – Specifically designed to meet and exceed the requirements of IEC, EN, and ANSI tests for power line applications.

**Maximum Mains voltage** – FP-EFT 100M2 is designed to operate at the maximum power supply voltages available anywhere in the world.

**Easy** – The simple design allows operators to test safely and easily.

**Mains switch** – This switch allows the disconnection of all phases and neutral so that no mains voltage is present at the CDN output.

**Sturdy and Reliable** – Careful component selection ensures that the FP-EFT 100M2 will continue to operate under the most strenuous testing regime.

**Faster completion of testing program** - Since the IEC 61000-4-4 Edition 2: 2004 requires a pure common mode test only the test time is sped up.

### ■ Applications

- ☑ Three phase power line systems
- ☑ IEC/ EN 61000-4-4 Edition 1 & 2 Power lines
- ☑ ANSI C62.41 & C.37.90.1 Power lines
- ☑ Many IEC & EN Product standards

## ■ Technical Specifications

Maximum Impulse Voltage	8kV Burst	Mains Connections	4mm safety banana sockets
Maximum AC Voltage	690V (Phase – Phase) 400V (phase – neutral)	EUT connections	4mm safety banana sockets
Maximum DC Voltage	110V	Phase Sync. source	fixed between L3 and PE
Maximum AC Current	100A	Coupling Paths	Manual Selection
Maximum DC Current	100A	Residual pulse voltage at line input	max. 10% of the applied impulse amplitude

Weights and Dimensions (W x H x D, net weight)		
FP-EFT 100M2	45 x 28 x 50 cm	45 kg

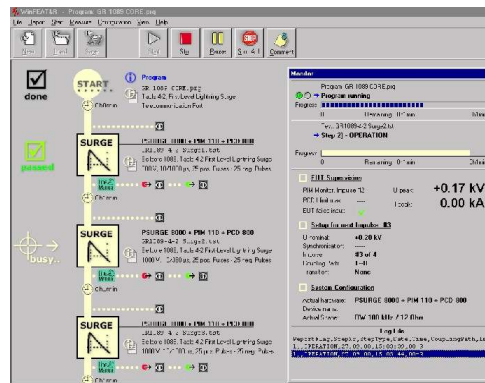
## ■ FP-EFT 100M2 Art. No. 2495860

- Qty. 1 FP-EFT 100M2 CDN
- Qty. 1 Coaxial HV cable 0.33m with SHV plugs
- Qty. 1 Cable set
- Qty. 1 Copper foil for ground connection
- Qty. 1 Users Manual

## ■ FP-EFT 100M Upgrade Art. No. 2495050

- Qty. 1 Hardware upgrade of a FP-EFT100M to a FP-EFT100M2 to fulfill the requirements of the IEC 61000-4-4 Ed.2 Am.1 January 2010  
Includes a calibration of the unit.

## WinFEAT&R Control Window



## ■ Options and Accessories

- PEFT 4010** Burst generator up to 4.8kV with an integrated single phase CDN according to IEC 61000-4-4 Edition 1 and 2 & ANSI C62.41  
*Art. No. 2496010*
- Adapter** Verification adapter to verify the impulse shape at the output of the FP-EFT 100M2  
*Art. No. 2490045*
- Verification Set** EFT verification set includes all attenuators and cables to perform an impulse verification either at the generator output or the CDN output  
*Art. No. 2499951*
- IP4A** Capacitive coupling clamp for control and data lines according to IEC 61000-4-4 and ANSI C37.90.1  
*Art. No. 2491300*
- WinFEAT&R** Control and reporting software. Runs under Windows 98, NT, ME, 2000, XP  
*Art. No. 2499701*

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)