









### **FEATURES:**

- **✓** MEETS IEC/EN 61000-4-4 EDITION 3
- ✓ PRE-PROGRAMMED TEST STANDARDS AND LEVELS
- **✓** OUTPUT UP TO 5KV
- ✓ COLOR TOUCH SCREEN INTERFACE
- **✓** REMOTE CONTROL SOFTWARE VIA USB OR FIBER OPTIC
- ✓ CONFIGURABLE WITH SURGE4-5 AND PQF4-11
- ✓ INTEGRATED 1PH/3-WIRE CDN

The EFT4-4 is the newest electrical fast transient/burst simulator designed to be lightweight and easy to use.

The EFT4-4 with integrated coupling network simulates electrical fast transient (EFT) as defined in IEC 61000-4-4 and EN 61000-4-4 standards. Due to the very short rise time of 5ns, the individual pulses generate a broadband RF spectrum up to 300 MHz.

The simple operation takes place via a capacitive color touch display. All parameters are clearly displayed without nested menus and can be changed quickly by tapping and using a digital rotary encoder. The normative test levels 1, 2, 3 and 4 are preprogrammed, additional test sequences can be stored via the memory function.

The EFT4-4 also offers a variety of special features such as "Real Burst", which simulates the natural appearance of the burst pulse or "noise" which simulates contact bouncing. The functions "IFM" and "DFM" (increasing or decreasing frequency) are important tools for examining resonance or saturation effects in the device under test.

#### **BURST DEFINITION**

	DEFINITION IN THE STANDARD	EFT4-4
Burst duration	15 ms ± 20% at 5 kHz 0,75 ms ± 20% at 100 kHz (corresponds to 75 pulses /package)	0,01 - 100 ms *1
Burst period	300 ms ± 20 %	10 - 1000 ms *1
Burst frequency	5 kHz or 100 kHz up to 4 kV	100 Hz - 125 kHz up to 5 kV
Pulse amplitude	0,5 / 1 / 2 / 4 kV	100 V - 5000 V (into 10 V steps)
Pulse rise-time	5 ns ± 30 %	
Pulse width (50 Ohm) Pulse-width (1 kOhm)	50 ns ± 30 % 50 ns, -15ns/+100 ns	*1: the EFT4-4 automatically takes into account the maximum power restrictions
Impedance	50 Ω ± 2 %	

# **TECHNICAL SPECIFICATIONS**

GENERATOR	
Burst frequency	single pulse up to 125 kHz
Pulse amplitude	100 V - 5000 V
Polarity	positive, negative, alternating
Pulse shape	acc. to IEC / EN 61000-4-4
Max. number of pulses / s	5000 (up to 2kV); 3000 (3kV) and 1500 (up to 5kV)
Max. number of pulses / burst	500
Remote Control	USB (virtual COM port) Option: optical interface with fiber optic

#### **COUPLING / DECOUPLING NETWORK**

Integrated in the generator, coupling the test pulses to supply lines of the test object		
Operating volt. AC	max. 230V / 16A, 50-60 Hz	
Operating volt. DC	max. 110V / 8A	
Phase indicator	LED red / green	
Coupling capacitors	33 nF	
Coupling selectors	L, N, PE ->E; L, N->E; a.s.o.	
EUT power outlets	AC power socket (Schuko), additionally laboratory sockets	
Operation temperature	0 - 40 °C	
Dimensions	19" housing, 3U	
Weight	app. 20 LBs	
Power supply	100-240V /47-63 Hz	

## **ACCESSORIES:**

- EFT-3PH-CDN Three Phase Coupler/60 Amps Per Line
- SURGE-EFT-3PH-CDN Three Phase Coupler/32 or 60 Amps Per Line
- EFT-DLC Capacitive Coupling Clamp
- EFT-DLC-CAL Cal Kit for Clamp
- EFT-CAL-KIT Attenuator Set for EFT Waveform Verification
- TIG.Control Remote Control Software



