



## EFT/Burst Generator

### EFT 500 Series

- IEC/EN 61000-4-4
- IEC/EN 61000-6-1
- IEC/EN 61000-6-2
- IEC/EN 61850-3
- IEC/EN 61326
- GB/T 17626.4
- ANSI/IEEE C62.41

#### Features

- > 5.7-inch color touch screen;
- > Burst voltage up to 5.0 kV;
- > Built-in automatic single / 3 - phase CDN;
- > Capable of controlling external 3-phase CDN with higher ratings;
- > Built-in CDN up to single/3-phase AC 380 V / 32 A, DC 400 V / 32 A;
- > Test sequence setting function;

#### Introduction

The EFT 500 Series Electrical Fast Transient Burst Generators are designed according to IEC 61000-4-4 to simulate repetitive, high-speed and low-energy spikes generated by the switching of inductive loads in industrial and commercial environment.

The max. test voltage is 5 kV. The device features excellent reliability, stable performance and user-friendly operation.

#### Application Areas



## Technical Parameters

|                                    |                                         |
|------------------------------------|-----------------------------------------|
| Source Output Voltage              | 0.25 kV ~ 5.0 kV, $\pm 10\%$            |
| Source Impedance                   | 50 $\Omega$                             |
| Coupling Capacitor                 | 33 nF                                   |
| 50 $\Omega$ Calibration Waveform   | 5 $\pm$ 1.5 ns, 50 ns $\pm$ 15 ns       |
| 1000 $\Omega$ Calibration Waveform | 5 $\pm$ 1.5 ns, 50 ns (- 15 / + 100 ns) |
| Pulse Frequency                    | 0.1 kHz ~ 1,000 kHz                     |
| Burst Period                       | 11 ms ~ 10,100 ms                       |
| Burst Duration                     | 0.001 ms ~ 1,000 ms                     |
| Trigger Mode                       | Auto, manual, external trigger          |
| Test Time                          | 1 s ~ 9,999 s                           |
| Polarity                           | Positive, negative, alternative         |

## General Parameters

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| Display Screen                 | 5.7" TFT touch screen                                        |
| Working Power                  | AC 220 V $\pm 10\%$ , 50 Hz/ 60 Hz                           |
| Fuse                           | 6 A                                                          |
| Maximum Power Consumption      | 200 VA                                                       |
| External Control Mode          | D-sub 25 pin                                                 |
| External Trigger Mode          | BNC, 5 V TTL                                                 |
| CRO Trigger Mode               | BNC, 5 V TTL                                                 |
| Operating Control Input        | BNC, 5 V TTL                                                 |
| External Synchronization Input | 45 Hz ~ 60 Hz, 20 V ~ 400 V                                  |
| Safety Circuit                 | Stop work when safety circuit is open                        |
| Failure Detection              | LCD display in front panel and stop work when failure occurs |
| Working Status Indication      | LED indication and LCD display in front panel                |
| Earth Mode                     | Flat grounding cable                                         |
| Dimension                      | 19"/6U rack, 450 (L) * 190 (H) * 620 (D) mm                  |
| Weight                         | Approx. 26 kg                                                |
| Ambient Temperature            | 15°C ~ 35°C                                                  |
| Relative Humidity              | 45% ~ 75%                                                    |
| Atmospheric Pressure           | 86 kPa ~ 106 kPa                                             |

## Standard Accessories

Power Cord, User Manual, Test Cables, Grounding cable, Fuse, CN25 Cable, RF cable

## Optional Accessories

|   |                                                  |                                                                                                                                                                                                                              |                                                                                       |
|---|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | EFT/Burst Calibration Kit                        | Model: EFT-CA-KIT (SHV)<br>Including:<br>Attenuator TFB 500(SHV):<br>50 $\Omega$ load, 500:1<br>Attenuator: TFB 1000(SHV):<br>1000 $\Omega$ load, 1000:1<br>HV-RF connector: SHV-BNC-JJ<br>BNC to banana plug: BNC(K)-2BP(J) |    |
| 2 | Capacitive Coupling Clamp                        | Model: CCC 100(SHV)                                                                                                                                                                                                          |   |
| 3 | Calibration Kit for Capacitive Coupling Clamp    | Model: CA - CCC(SHV)                                                                                                                                                                                                         |  |
| 4 | CDN for EFT / Burst Immunity Test on Power Lines | Model: EFTN series or SEPN Series<br>(for EUT with higher ratings)<br>*Contact sales for further information                                                                                                                 |  |
| 5 | Oscilloscope: 500 MHz                            | Recommended model:<br>Tektronix MDO 3052                                                                                                                                                                                     |  |

## EFT 500 Series Selection Guide

|          |                                                                                                      |
|----------|------------------------------------------------------------------------------------------------------|
| EFT 500S | Built-in single-phase CDN, AC 380 V 32 A, DC 400 V 32 A                                              |
| EFT 500T | Built-in 3-phase CDN, AC 380 V 32 A, DC 400 V 32 A                                                   |
| EFT 500G | Without CDN, need configure external CDN (EFTN / SEPN series)<br>* Contact sales for detailed model. |

**SUZHOU 3CTEST ELECTRONIC CO., LTD.** 

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Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

E-mail: [globalsales@3ctest.cn](mailto:globalsales@3ctest.cn)

Service: [service@3ctest.cn](mailto:service@3ctest.cn)

Tel: +86 - 512 - 68077192

Web: [www.3ctest.com](http://www.3ctest.com)



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