

7kV Electrical Fast Transient/burst Simulator

EFT 700x



In compliance with

- > IEC 61000-4-4
- > GB/T 17626.4
- > IEC 61000-6-1
- > IEC 61000-6-2

Introduction

EFT 700x series intelligent Electrical Fast Transient Simulator has been built-in fully automatic single-phase or three-phase power line coupling/decoupling network, and includes high voltage terminals to connect capacitive coupling clamp.

EFT 700S (built-in single- phase network)

EFT 700T (built-in three- phase network)

Meet the requirements of IEC 61000-4-4 with high reliability, stable performance, convenient to operate, etc.

Features

- > 5.7 inch colorful touch screen
- > Max. Pulse output voltage 7.0kV;
- > Parameter test scheduling test
- > Available for controlling external three-phase large current coupling/decoupling network (Max DC 1500V 100A、 AC 700V 100A three-phase five-wire);
- > Ethernet, RJ45 port for PC remote control, print and documentation;

Application Areas

- | | |
|----------------|--------------------------|
| >Communication | > Information technology |
| > Telecom | > Military |
| > Medical | > Aviation |
| > Radio and TV | > New energy power |
| > Railway | > Electric Vehicle |

| General parameters | |
|-------------------------------|---|
| Display screen | 5.7 inch TFT touch screen |
| Working power supply range | AC 110 V/220 V, $\pm 10\%$, 50/60 Hz $\pm 5\%$ (AC 220 V 50 Hz for China mainland) |
| Fuse | 6 A |
| Power consumption | 200 W |
| User storage space | Infinity (PC) |
| Communication mode | Ethernet LAN、RJ45 |
| External control mode | D-sup 25p |
| External trigger input | BNC,5 V TTL |
| CRO trigger output | BNC,5 V TTL |
| Running control input | BNC,5 V TTL |
| Warning lamp output | 0 ~ 220 VAC 10 A/0 ~ 48 V DC 3 A, depending on the type of external signal lamp |
| Safety circuit | Test only started when it is closed |
| Failure detection | Front panel LCD display and interrupt working |
| EUT voltage monitoring output | BNC, 100:1 coaxial terminal output (default L1-N voltage) |
| Working indicator | Front panel LED and LCD display |
| Grounding connection | Flat ground wire |
| EUT power injection | 4mm2 banana plug |
| Detection output | Standard 1m coaxial cable |
| Size | 19 inch/6 U |
| Weight | Approx.26 kg |
| Temperature range | 15 ~ 35 °C |
| Humidity range | 45% ~ 75% |
| Air pressure range | 86kPa ~ 106kPa |

| EFT Pulse parameters | |
|----------------------|---|
| Standard | IEC / EN 61000-4-4、GB/T 17626.4 |
| Test voltage range | 1.5 kV ~ 7.0 kV $\pm 10\%$ |
| Polarity | +, -, Positive/Negative |
| Source impedance | 50 ohm |
| Pulse waveform | 5/50 ns,50 ohm and 1000 ohm load |
| Rise time | 5 ns $\pm 30\%$, 50 ohm load 1000 ohm load |
| Pulse duration | 50 ns $\pm 30\%$, 50 ohm load 50 ns -15/+100 ns, 1000 ohm load |
| Pulse frequency | 0.1kHz ~ 100 kHz |
| Burst duration | Standard 75(1 ~ 267) |
| Burst period | 11ms ~ 10100ms |
| Test duration | 1s ~ 9999s |
| Trigger mode | Auto, manual or external |
| CDN | Built-in/Automatic; Coupling: capacitor; Decoupling: inductance; Residual voltage:<10% |
| EUTloading capacity | MAX AC 690 V 32 A , DC 1000 V 32 A |

| Standard Accessories | |
|--------------------------|-----------------------------|
| 1.CDN | 5. Fuse |
| 2. Three-core power cord | 6. Coaxial cable |
| 3.Test wire | 7.Factory inspection report |
| 4.Grounding wire | 8.User manual |

| EFTN 38100T (Optional) | |
|--|---|
| External three-phase fully automatic CDN | As per EN/IEC 61000-4-4, voltage up to 4.2 kV ~ 6.3 kV |
| EUT load capacity | EFTN 38100T (AC 3×440 V 100 A three-phase five -wire 50/60 Hz、DC 500 V 100 A) |
| Crate size | 19"/22 U |
| Weight | Approx.30 kg |

| EFTN 69100T (Optional) | |
|--|--|
| External three-phase fully automatic CDN | As per EN/IEC 61000-4-4, voltage up to 4.2 kV ~ 6.3 kV |
| EUT load capacity | EFTN 69100T (AC 3×700 V 100 A three-phase five-wire 50/60 Hz、DC 1000 V 100 A) |
| Crate size | 19"/6 U |
| Weight | Approx.40 kg |

| EFTN 15100T (Optional) | |
|--|---|
| External three-phase fully automatic CDN | As per EN/IEC 61000-4-4, voltage up to 4.8 kV (7.0 kV customized) |
| EUT load capacity | EFTN 15100T (AC 3×700 V 100 A three-phase five-wire 50/60 Hz、DC 1500 V 100 A) |
| Cabinet size | 19"/22 U |
| Weight | Approx.100 kg |

| Others (Optional) | |
|-----------------------------|--|
| Capacitive coupling clamp | CCC data signal line test |
| Burst calibration kits | Including TFB 50/ TFB 1000, network port adapter and suitcase to meet burst calibration; TFB 50: input impedance 50Ω、 output impedance 50Ω、 attenuation 55dB; TFB 1000: input impedance 1000Ω、 output impedance 50Ω、 attenuation 60dB; |
| PC control software Corelab | With PC installed WIN 7, WIN 8 and WIN 10, it can be easily operated to make the measurement, based on the customized test program. It can identify any device with automatic configuration. It can easily generate test reports. |



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