

EFT 500N8

ELECTRICAL FAST TRANSIENT GENERATOR



FOR TESTS ACCORDING TO ...

- > EN 61000-4-4
- > EN 61000-6-1
- > EN 61000-6-2
- > IEC 61000-4-4
- > IEC 61326
- > IEC 61850-3







EFT 500N8 - EFT/BURST TESTER

The EFT 500N8 is the state-of-the-art EFT/Burst tester with a built-in coupling/decoupling network for single phase or three-phase mains supply lines and a HV terminal to connect a capacitive coupling clamp. The spike frequency can be varied from as low as 100Hz to 1,000kHz. The EFT 500N8 is capable to generate 1,000 spikes per second or up to 150 spikes per burst. Its performance complies with IEC 61000-4-4:2004, IEC 61000-4-4 Amd.1 Ed.2:01/2010 and IEC 61000-4-4 Ed.3: 03/2012. Pre-programmed Standard Test routines and a number of selected User Test routines make the EFT 500N8 an optimum standalone solution for both testing during development and final testing of products and sub-assemblies.

HIGHLIGHTS

- > Standalone Tester
- > 7,000V Burst voltage
- > Spike frequency 1MHz
- > Built-in 1ph or 3ph coupler
- > USB (optical link) and GPIB interface
- > Standard Test routines

APPLICATION AREAS

- | | |
|---|--|
|  INDUSTRY |  TELECOM |
|  MEDICAL |  COMPONENTS |
|  BROADCAST | |
|  RESIDENTIAL | |

TECHNICAL DETAILS

EFT 500N8 MODELS

| | |
|-------------|---------------------------------------|
| EFT 500N8 | With 1-phase coupler; 250V/16A |
| EFT 500N8.1 | With 3-phase coupler; 3 x 440V/32A |
| | Other couplers on special request |

TEST LEVEL

| | |
|------------------|---------------------------|
| Voltage range | 1,000V - 7,000V |
| Into 50ohm | 500V - 3,500V |
| Pulse shape | 5/50ns into 50ohm load |
| Rise time tr | 5ns ± 30% |
| Pulse width td | 50ns ± 30% |
| Pulse shape | 5/50ns into 1,000ohm load |
| Rise time tr | 5ns ± 30% |
| Pulse width td | 35ns to 150ns |
| Source impedance | 50ohm ± 20% |
| Polarity | Positive/negative |

TRIGGER

| | |
|-----------------------|--|
| Automatic | Automatic release of the bursts |
| Manual | Manual release of a single pulse |
| External | External release of a single pulse |
| Burst duration | Td = 0.10ms - 999.9ms |
| Burst repetition rate | Tr = 10ms - 9,999ms/man Tr ≤ 9,999ms ⇒ Auto Trigger Tr > 9,999ms ⇒ Man Trigger |
| Spike frequency | f = 0.1kHz - 1,000kHz |
| Test duration | T = 0:01 min - 99:59 min T > 99:59 min - endless |

OUTPUT

| | |
|---------------|---|
| Direct | Via HV coax connector |
| Coupler | L, N and PE, all combinations |
| DUT supply AC | 250V/16A, 50/60Hz |
| DUT supply DC | 250V/10A |
| DUT supply | Other DUT supply voltages on request |
| CRO Trigger | 15V trigger signal for oscilloscope; burst duration and pulse frequency can be checked |

TEST ROUTINES

| | |
|------------------------|---|
| Quick Start | Immediate start; easy-to-use and fast |
| User Test routines | 1. Custom made test routines 2. Change voltage after T 3. Change frequency after T 4. Frequency sweep within a burst 5. Change burst duration after T 6. Randomly released bursts 7. Synchronous burst mode 8. Change polarity after T |
| Standard Test routines | 1. As per IEC 61000-4-4, Level 1-5 2. Automatic test Level X to level Y |
| Service | Service, set-up, self test |

INTERFACES

| | |
|--------------------|---|
| Optical interface | Opto link, 3 m cable USB A connector |
| Parallel interface | IEEE 488, address 1 - 30 |
| CN interface | To control external CNI 503 |

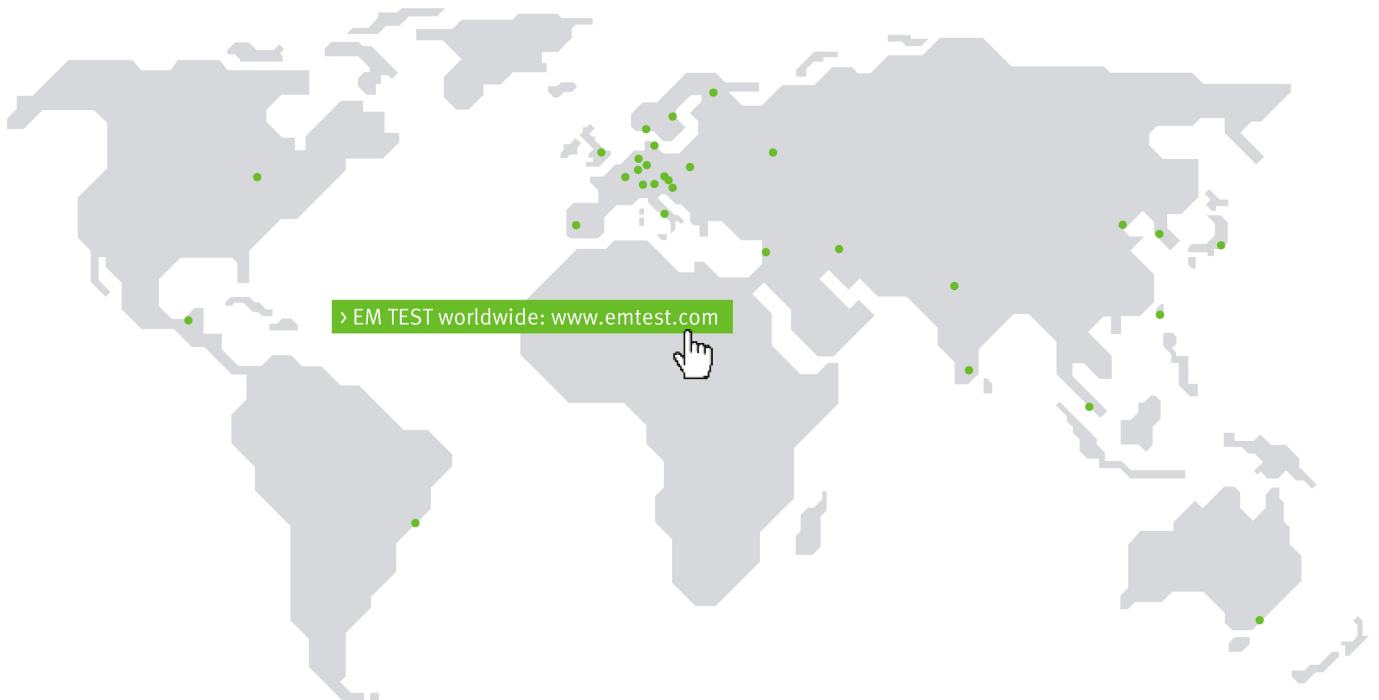
GENERAL DATA

| | |
|--------------------|--|
| Dimensions, weight | EFT 500N8: 19"/3HU, approx. 15kg EFT 500N8.1: 19"/6HU, approx. 19kg |
| Supply voltage | 115/230V +10/-15% |
| Fuses | 2x T 2AT (230V); 2x T 4AT (115V) |

OPTIONS

| | |
|-------------|--|
| HFK | Coupling clamp as per IEC 61000-4-4 |
| ADA 800 | SHV-Adapter for HFK connection |
| KW 50 | 50ohm matching resistor for verification |
| KW 1000 | 1,000ohm matching resistor for verification |
| 6dB | 6dB attenuator |
| CNI 503 | Coupling/decoupling networks, 3x440V/32-63-100A |
| iec.control | Software to control the test, including standard library, test report facility and data conversion generator |
| CA EFT kit | Kit for burst pulse verification consisting of KW50, KW1000 and adapter for EUT port in a plastic case for storage |

COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.