

# 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



## CONTACT EM TEST DIRECTLY

### Switzerland

AMETEK CTS GmbH > Sternenhofstraße 15 > 4153 Reinach > Switzerland  
 Phone +41 (0)61 204 41 11 > Fax +41 (0)61 204 41 00  
 Internet: www.ametek-cts.com > E-mail: sales.conducted.cts@ametek.com

### Germany

AMETEK CTS Europe GmbH > Customer Care Center EMEA > Lünener Straße 211  
 > 59174 Kamen > Germany  
 Phone +49 (0) 2307 26070-0 > Fax +49 (0) 2307 17050  
 Internet: www.ametek-cts.com > E-mail: info.cts.de@ametek.com

### Poland

AMETEK CTS Europe GmbH > Biuro w Polsce > ul. Twarda 44 > 00-831 Warsaw > Poland  
 Phone +48 (0) 518 643 12  
 Internet: www.ametek-cts.com > E-mail: Infopolska.cts@ametek.com

### USA / Canada

AMETEK CTS US > 52 Mayfield Ave > Edison > NJ 08837 > USA  
 Phone +1 732 417 0501  
 Internet: www.ametek-cts.com > E-mail: usasales.cts@ametek.com

### P.R. China

E & S Test Technology Limited > Rm 913, Leftbank >  
 No. 68 Bei Si Huan Xi Lu > Haidian District > Beijing 100080 > P.R. China  
 Phone +86 (0)10 82 67 60 27 > Fax +86 (0)10 82 67 62 38  
 Internet: www.emtest.com > E-mail: info@emtest.com.cn

### Republic of Korea

EM TEST Korea Limited > #405 > WooYeon Plaza > #986-8 > YoungDeok-dong >  
 Giheung-gu > Yongin-si > Gyeonggi-do > Korea  
 Phone +82 (31) 216 8616 > Fax +82 (31) 216 8616  
 Internet: www.emtest.co.kr > E-mail: sales@emtest.co.kr

### Singapore

AMETEK Singapore Pte. Ltd > No. 43 Changi South Avenue 2 > 04-01 Singapore  
 48164  
 Internet: www.ametek-cts.com > E-mail: singapore.sales.cts@ametek.com

### Great Britain

AMETEK GB > 5 Ashville Way > Molly Millars Lane > Wokingham > Berkshire  
 RG41 2 PL > Great Britain  
 Phone +44 845 074 0660  
 Internet: www.ametek-cts.com

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.