

EFT 500N5

ELECTRICAL FAST TRANSIENT GENERATOR



FOR TESTS ACCORDING TO ...

- > ANSI/IEEE C62.41
- > EN 61000-6-1
- > EN 61000-6-2
- > IEC 60601-1-2:2002
- > IEC 61000-4-4
- > IEC 61326
- > IEC 61850-3







EFT 500N5 - EFT/BURST TESTER

The EFT 500N5 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 up to 1,000kHz. The EFT 500N5 is capable to generate 10,000 spikes per second or up to 1,000 spikes per burst. Its performance fully complies with IEC 61000-4-4 Ed.2:2004. Pre-programmed Standard Test routines and a number of selected User Test routines make the EFT 500N5 an optimum standalone solution for both testing during development and final testing of products and sub-assemblies.

HIGHLIGHTS

- > **10,000 PULSES/SEC.**
- > **4.8KV BURST VOLTAGE**
- > **SPIKE FREQUENCY UP TO 1MHZ**
- > **BUILT-IN 1PH OR 3PH COUPLER UP TO 50A**
- > **PULSE VERIFICATION ACC. TO ED.2 ON EACH COUPLING PATH**

APPLICATION AREAS

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

TECHNICAL DETAILS

EFT 500N MODELS

EFT 500N5	With 1-phase coupler, 250V/16A
EFT 500N5.1	With 3-phase coupler, 3x 440V/32A
EFT 500N5.2	With 3-phase coupler, 3x 440V/50A
	Other couplers on special request

TEST LEVEL

Voltage range	200V - 4,800V
Into 50ohm	100V - 2,400V
Pulse shape	Into 50ohm load
Rise time tr	5ns ± 30%
Pulse width td	50ns ± 30%
Pulse shape	Into 1,000ohm load
Rise time tr	5ns ± 30%
Pulse width td	35ns to 150ns
Source impedance	50 Ohm ± 20%
Polarity	Positive/negative

TRIGGER

Release of Burst	Automatic, manual, external
Burst duration	Td = 0.1ms - 999.9ms
Burst repetition rate	Tr = 10ms - 9,999ms
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	Custom made test routine Change voltage after T Change frequency after T Frequency sweep within a burst Change burst duration after T Random release of bursts Synchronous burst mode Change polarity after T
Standard Test routines	As per IEC 61000-4-4, Automatic test Level X - Y
Service	Service, set-up, self test

INTERFACES

Serial interface	USB
Parallel interface	IEEE 488, address 1 - 30
CN interface	To control external CNI 503

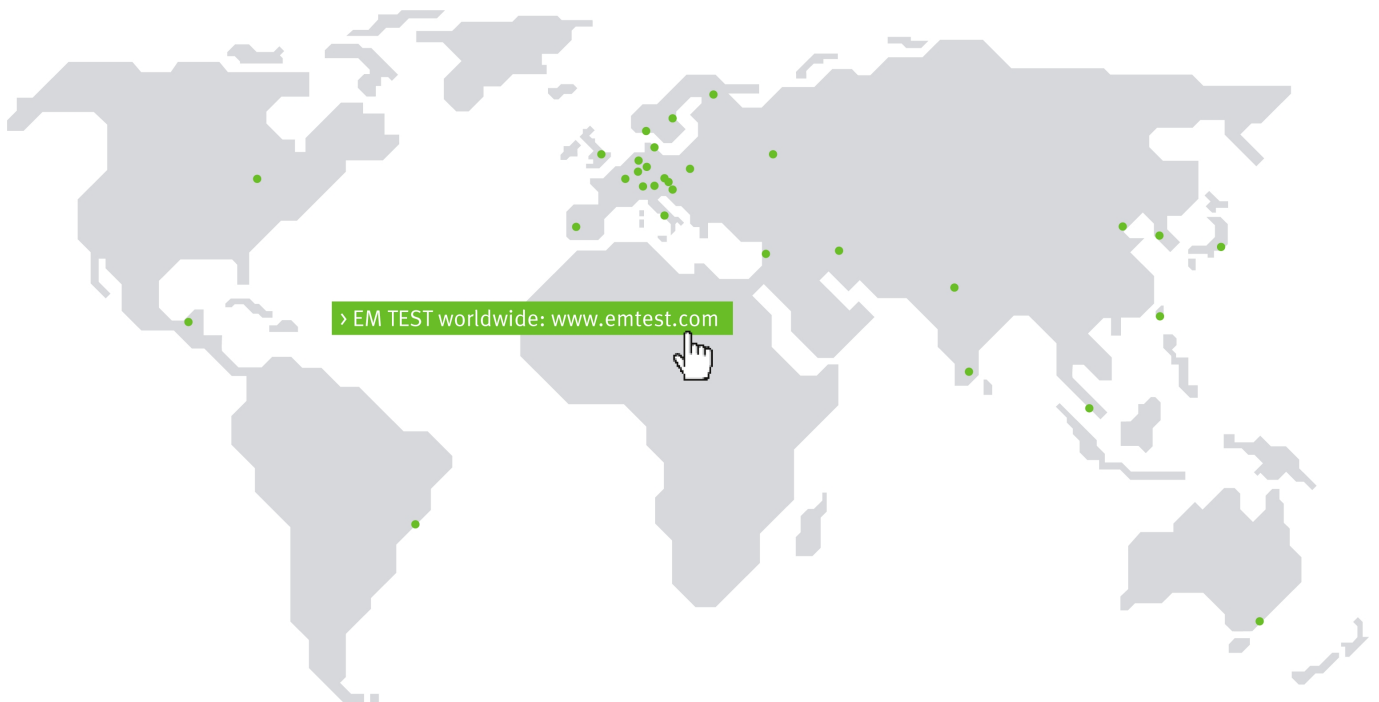
GENERAL DATA

Dimensions, weight	EFT 500N5: 19"/3HU, 13kg EFT 500N5.1: 19"/6HU, 17kg EFT 500N5.2: 19"/6HU, 18kg
Supply voltage	115/230V, +10/-15%
Fuses	2 x T 2AT (230V); 2 x T 4AT (115V)

OPTIONS

HFK	Coupling Clamp as per IEC 61000-4-4
KW 50	50ohm matching resistor for verification
KW 1000	1,000ohm matching resistor for verification
CA EFT kit	Kit for burst pulse verification consisting of KW50, KW1000 and adapter for DUT port with plastic case for storage
A6dB	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

COMPETENCE WHEREEVER YOU ARE



CONTACT EM TEST DIRECTLY

Switzerland

EM TEST AG > Sternenhofstraße 15 > 4153 Reinach > Switzerland
 Phone +41 (0)61/7179191 > Fax +41 (0)61/7179199
 Internet: www.emtest.ch > E-mail: sales@emtest.ch

Germany

EM TEST GmbH > Lünener Straße 211 > 59174 Kamen > Deutschland
 Phone +49 (0)2307/26070-0 > Fax +49 (0)2307/17050
 Internet: www.emtest.com > E-mail: info@emtest.de

France

EM TEST FRANCE > Le Trident - Parc des Collines > Immeuble B1 - Etage 3 >
 36, rue Paul Cézanne > 68200 Mulhouse > France
 Phone +33 (0)389 31 23 50 > Fax +33 (0)389 31 23 55
 Internet: www.emtest.fr > E-mail: info@emtest.fr

P.R. China

EM TEST Representative Office Beijing > 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: emtestbj@public.bta.net.cn

Malaysia

EM TEST (M) SDN BHD > Unit B2-6, Jalan Dataran SD2 > Dataran SD2, PJU9 >
 Bandar Sri Damansara > 52200 Kuala Lumpur > Malaysia
 Phone +60 (03)62 73 22 01 > Fax +60 (03)62 74 22 01
 Internet: www.emtest.com > E-mail: sales@emtest.com.my

Poland

EM TEST Polska > ul. Lema 33, 26-613 Radom > Polska
 Phone +48 518 64 35 12 > E-mail: info.polska@emtest.de

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