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TSS 500N2F

TELECOM SURGE GENERATOR



FOR TESTS ACCORDING TO ...

› FCC 97-270 (part 68)

TSS 500N2F - TELECOM SURGE GENERATOR FOR SURGE A PULSES AS PER FCC PART 68

Telecommunication networks are exposed to lightning events. Therefore telecommunication equipment being connected to the outside world need to have appropriate protection to show an acceptable immunity to surge transients in order not to fail in case of lightning events. Telecom Surge Simulators of the TSS 500N series are used to proof the immunity of telecommunications equipment.
The TSS 500N2F is used for Surge A pulse testing and AC power line surge testing as per FCC 97-270 (part 68).

HIGHLIGHTS

- **FCC part 68 Surge A and Power line surge**
- **Includes pulses 2/10us, 10/560us and 10/160us**
- **Auto-setting of source impedance for each pulse**
- **Built-in CDN for Telecom ports**
- **Built-in CDN for AC power ports**
- **Standard Test routines**
- **Manual operation**
- **USB and GPIB interface**

APPLICATION AREAS

- COMPONENTS
- TELECOM

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TECHNICAL DETAILS

POWER LINE SURGE, PULSE 2/10US	
Voltage (o.c.)	160V - 2,500V ± 10%
Rise time	‹ 2us
Pulse duration	› 10us
Current (s.c.)	64A - 1,000A
Rise time	‹ 2us
Pulse duration	› 10us
Polarity	Positive, negative or alternating
Counter	1 - 30,000 or endless

SURGE A LONGITUDINAL, PULSE 10/160US	
Voltage (o.c.)	160V - 1,500V ± 10%
Rise time	‹ 10us
Pulse duration	› 160us
Current (s.c)	20A - 200A per wire
Rise time	‹ 10us
Pulse duration	› 160us
Polarity	Positive, negative or alternating
Counter	1 - 30,000 or endless

SURGE A METALLIC, PULSE 10/560US	
Output voltage open circuit	160V - 1,000V ± 10%
Rise time	‹ 10us
Pulse duration	› 560us
Current (s.c.)	10A - 100A per wire
Rise time	‹ 10us
Pulse duration	› 560us
Polarity	Positive, negativ or alternating
Counter	1 - 30,000 or endless

COUPLING	
Telecom ports	Tip to Ground, Ring to Ground, Tip and Ring to Ground
Power ports 250V/16A	L-N, L-PE, N-PE, L+N-PE

MEASUREMENTS	
Peak voltmeter	2,500V ± 10%
Peak current meter	1,000A ± 10%

TRIGGER	
Automatic	Automatic pulse release
Manual	Single pulse release
External	External pulse release
CRO trigger	5V trigger signal for oscilloscope
Synchronisation	0° - 360° (for ac power ports)

TEST ROUTINES	
Quick Start	Immediate start; easy-to-use and fast
User Test routines	Manual Standard Test Routines Change Polarity after n pulses Change voltage after n pulses
Standard Test routines	Test pulses/levels as per FCC part 68
Service	Service, setup, self test

INTERFACE	
Serial interface	USB
Parallel interface	IEEE 488, addresses 1 - 30
CN interface	To control external coupling network

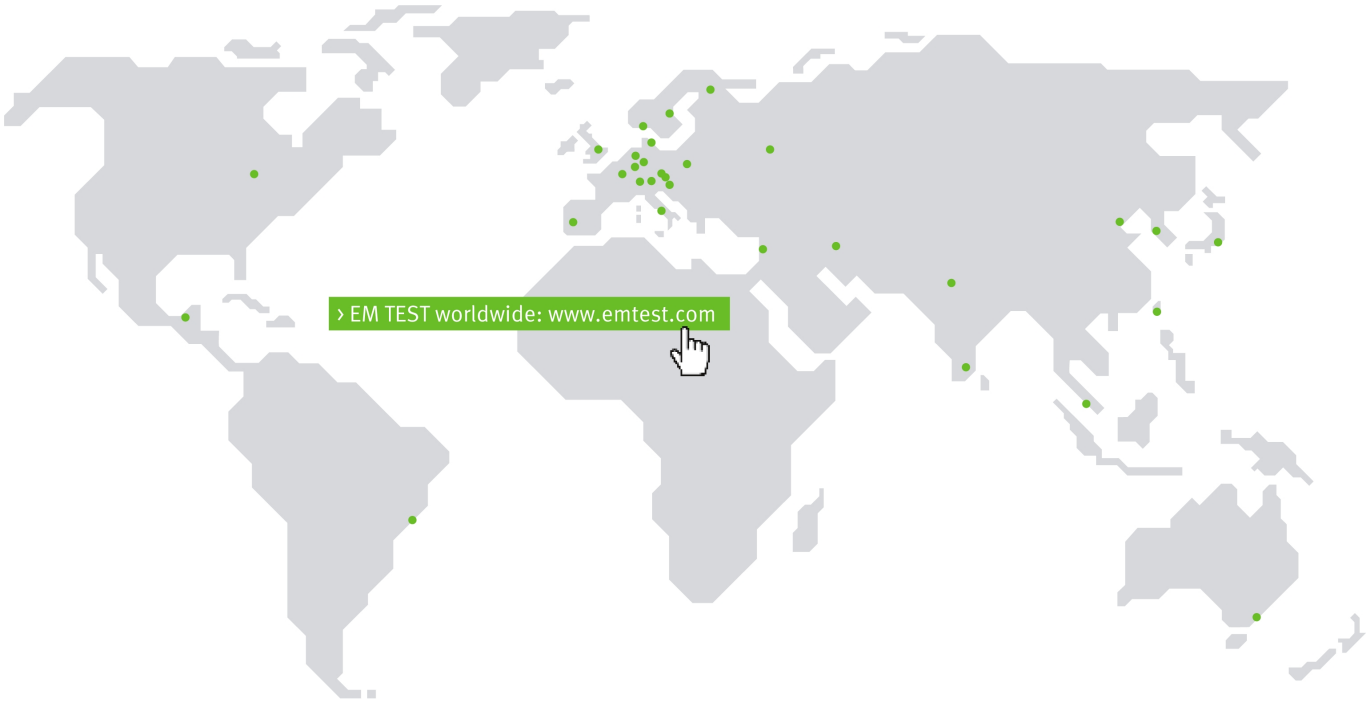
SAFETY	
Safety circuit	Control input (24Vdc)
Warning lamp	Floating output contact

GENERAL DATA	
Dimensions, weight	19"/6HU, approx. 35kg
Supply voltage	115/230V +10/-15%
Fuses	2xT2AT (230V) or 2xT4AT (115V)

OPTIONS	
iec.control	Software to control the test, including standard library, test report facility and data conversion generator

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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.