

# TSS 500 N2B

## TELECOM SURGE GENERATOR



### FOR TESTS ACCORDING TO ...

› Bellcore GR-1089-Core

### TSS 500N2B - TELECOM SURGE SIMULATOR AS PER TELCORDIA/BELLCORE GR-1089, 10/1,000US

The surge simulator type TSS 500N2B generates high voltage transients with a waveform of 10/1,000 $\mu$ s up to 2,000V as required by Tellcordia/Bellcore GR-1089 issue 6 section 4.6.2.1 First Level Lightning Surge.  
For this test application a huge energy storage capacitor bank is needed to provide the requested high-energy surge pulses.

### HIGHLIGHTS

- › Standalone Tester for Bellcore
- › Test pulse 10/1000 $\mu$ s up to 2,000V
- › Covers First Level Lightning Protection testing
- › Voltage and current monitor outputs
- › Pre-programmed Test routines
- › Manual operation
- › USB and GPIB interface

### APPLICATION AREAS

-  COMPONENTS
-  TELECOM

## TECHNICAL DETAILS

### FIRST LEVEL LIGHTNING PROTECTION, PULSE 10/1,000 S

Output Voltage (open circuit)	100V to 2,000V -0/+15%
Rise time $t_r$	10 $\mu$ s -4 $\mu$ s/+0 $\mu$ s
Pulse duration $t_d$	1,000 $\mu$ s -0 $\mu$ s/+500 $\mu$ s
Output Current (short circuit)	10A to 200A per wire, -0/+15%
Rise time	10 $\mu$ s -4 $\mu$ s/+0 $\mu$ s
Pulse duration	1,000 $\mu$ s -0 $\mu$ s/+500 $\mu$ s
Polarity	Positive, negative or alternating
Energy storage capacitance	4,230 $\mu$ F
Max. stored energy	8,460J @ 2,000V

### OUTPUTS

Telecom ports	T1, T2, T3 and T4
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### MEASUREMENTS

Peak voltmeter	2,000V +10%/-10%
Peak current meter	800A +10%/-10%

### TRIGGER

Automatic	Automatic pulse release
Manual	Single pulse release
External	External pulse release
CRO trigger	5V trigger signal for oscilloscope

### TEST ROUTINES

Quick Start	Immediate start; easy to use and fast
User Test routines	Change voltage after n pulses Change Polarity after n pulses
Service	Service, setup, self test

### INTERFACE

Serial interface	USB
Parallel interface	IEEE 488, addresses 1 to 30

### SAFETY

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

### GENERAL DATA

Dimensions, weight	19"/25HU mini rack, approx. 120kg
Supply voltage	115V / 230V +10/-15% 50/ 60Hz
Fuses	2 x 2AT

# 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.