

# TSS 500M2F

## TELECOM SURGE GENERATOR



### FOR TESTS ACCORDING TO ...

› FCC 97-270 (part 68)

### TSS 500M2F - 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 500 series are used to proof the immunity of telecommunications equipment.

The TSS 500M2F is used for Surge A pulse testing and AC power line surge testing as per FCC 97-270 (part 68).

### HIGHLIGHTS

- › **STANDALONE TESTER FOR FCC PART 68**
- › **INCLUDES SURGE A AND POWER LINE SURGE PULSES**
- › **BUILT-IN CDN FOR TELECOM PORTS**
- › **BUILT-IN CDN FOR AC POWER PORTS**
- › **MANUAL OPERATION**
- › **STANDARD TEST ROUTINES**
- › **RS232 AND GPIB INTERFACE**

### APPLICATION AREAS

-  COMPONENTS
-  TELECOM

## 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 - 800V ± 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	1,000V ± 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 levels as per FCC part 68
Service	Service, setup, self test

### INTERFACE

Serial interface	RS 232, baud rate 1,200 - 19,200
Parallel interface	IEEE 488, address 1 - 30
CN interface	To control external coupling network

### SAFETY

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

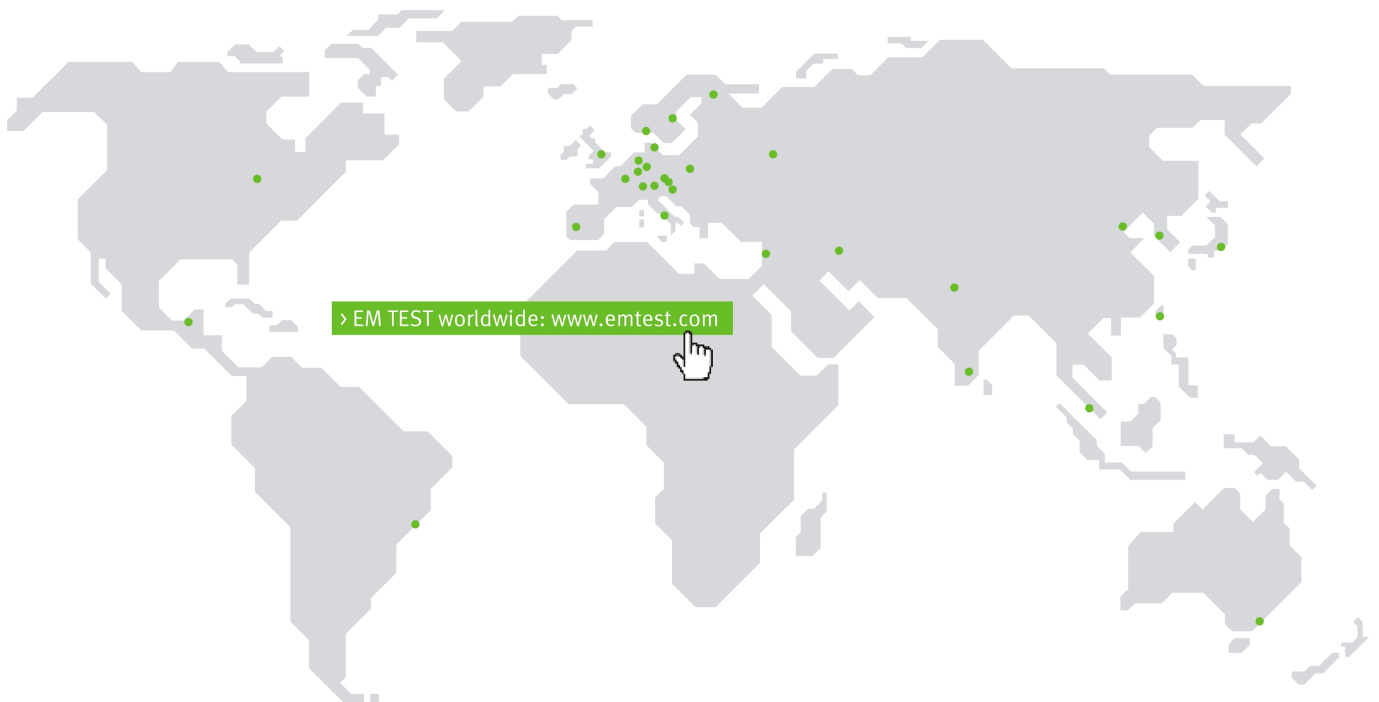
### GENERAL DATA

Dimensions, weight	19"/6HU, approx. 35kg
Supply voltage	115/230V +10/-15%
Fuses	2xT 2AT (230V) or 2xT 4AT (115V)
Interfaces	RS 232 and IEEE 488

### OPTIONS

CNV 504S1	4 telecom lines as per fig. 12, IEC 61000-4-5
CNV 508S1	8 telecom lines as per fig. 12, IEC 61000-4-5
iec.control	Software to control the test, including standard library, test report facility and data conversion generator

# COMPETENCE WHEREEVER 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.  
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