



NSG 2025 FAST TRANSIENT/BURST GENERATOR



- High end burst generator
- Pulse amplitudes up to 8 kV
- Burst frequencies up to 500 kHz
- Integrated single or 3-phase coupling network

The NSG 2025 is a high end burst generator and the choice for users who need the maximum in pulse amplitude/frequency capabilities, flexibility, coupling network features and EUT connectivity. Based on a 'building block' concept, NSG 2025 lets you select and combine pulse generator, coupling and EUT adapters to create a flexible, upgradeable EMC test work station to match your needs today and into the future. It covers all the widely used burst test specifications of IEC, EN, ANSI-IEEE as well as the known extended manufacturer's requirements.

Powerful pulse generation

The NSG 2025 offers the most extensive range of pulse voltages and burst frequencies available in a single instrument. Pulses can be coupled into the mains supply voltage or applied as a pure high voltage for data and signal line testing. Preprogrammed IEC standard tests are available at the touch of a button and pulse parameters are user configurable manually via front panel control or via PC-Windows software control. Not only does the NSG 2025 meet all the requirements of current world test standards with comfortable margins, it also anticipates likely future modifications with functions including a user-configurable burst frequency to 1 MHz and extended selectable coupling modes.

One system for all needs

A wide range of test accessories is available for the NSG 2025. The supply voltage is switchable between 110/115 V and 220/240 V, and country-specific power-line sockets for the EUT are interchangeable so full compliance and volume production tests can be run on finished products and systems destined for different markets.

Built-in safety

Every component in the NSG 2025 that carries a high voltage is designed to be inherently safe, with interlock features built into the hardware, ensuring automatic power-down in case of violation of any safety condition.

Manual control

The standard, preprogrammed IEC tests can be called up, and used straight away or be modified and saved. All test parameters including pulse amplitude, duration, rise time and polarity as well as burst frequency, duration and phase angle can be set manually, for custom testing. Up to eight different custom tests can be saved and used again or modified at any time.

Software control

The WIN 2025 Windows-based software module allows remote, real-time access to all the instrument functions and provides a whole range of additional test sequencing, programming and reporting capabilities. Any of the saved, pre-programmed or custom tests can easily be combined into a sequence for automatic execution.

Professional reporting

A sophisticated report generator provides automatic reporting of results in a professional format - with a facility for on-line addition of engineers' comments. These records provide an invaluable reference for design engineers throughout the verification process and meet legal requirements for proof of compliance testing.



Advanced Test Solutions for EMC

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Technical specifications

Pulse amplitude:	200 V to 8 kV (open circuit) in steps of 10 V
Polarity:	+ or - selectable
Rise time:	5 ns \pm 30% (10-90%)
Pulse width:	50 ns \pm 30% (50 Ω / $<$ 2 Ω), 100 ns \pm 50% ($>$ 1 k Ω)
Burst frequency:	0.1 to 500 kHz \pm 2%
Pulses per packet:	1 to 150 pulses
Burst repetition:	100 ms to 10 s \pm 2 ms or 2%
Impedance:	50 Ω \pm 20%
Phase angle:	asynchronous/synchronous 0 to 360° \pm 2°

Ordering information

NSG 2025-7	8 kV, 500 kHz, 1-phase, 30 A
NSG 2025-8	8 kV, 500 kHz, 3-phase, 30 A per phase
Options:	
WIN 2025	Software control package
CDN 8014	Capacitive coupling clamp acc. to IEC/EN 61000-4-4 with SHV connector without interlock, including interconnection cables
CDN 8015	Capacitive coupling clamp acc. to IEC/EN 61000-4-4 with SHV connector and interlock, including interconnection cables
INA 161	Rack mounting brackets
Adapters for EUT connection with national plugs	
INA 250	IEC 309 32A 3-phase (red) for max burst voltage 8 kV
INA 251	IEC 309 16A 1-phase (blue) for max burst voltage 8 kV
INA 252	Germany, Schuko 1-phase 16 A
INA 253	Switzerland, 1-phase 10 A
INA 254	France, 1-phase 16 A
INA 255	GB, 1-phase 13 A
INA 256	US, 1-phase 15 A
INA 260	Warning lamp assembly
INA 261	Separate SHV plug for 5 mm cables
INA 262	Universal safety plug set
INA 303B	Optical link set, 10 m opto-cable, 100 to 240 VAC