

Pulse 1/2/6 Generator

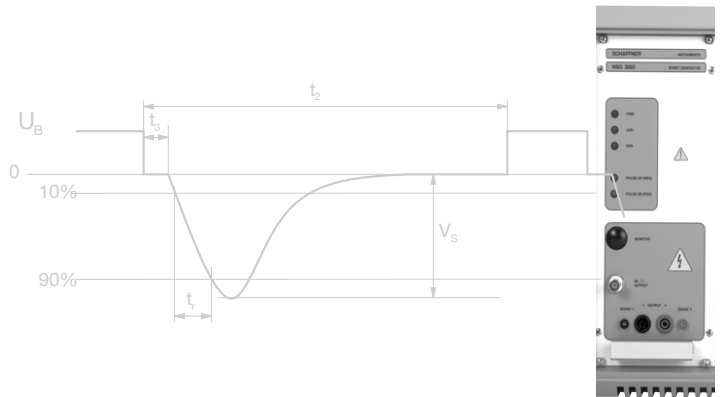
NSG 5001A

- ISO / SAE / manufacturers' surge pulses
- Wide range of programmable parameters
- Provision for additional external impedances

Switching actions with inductive loads on the vehicle supply harness, dc motors that work as generators when the vehicle supply is switched off, and the effects that occur when an ignition coil is switched off can all create disturbances that have to be simulated and their consequences checked. ISO and SAE have specified these tests under pulse designation 1/2/6.

The NSG 5001 produces these test pulses in conformance with the relevant standard. In order to be able to cope with a company's own test methods, the generator module also provides a much greater range of selectable parameters, considerably higher test voltages, additional impedances and further pulse widths.

The automatic battery switch-off and restore function which is sometimes required is provided by the option INA 5020.



Brief Specifications				NSG 5001A Pulse 1/2/6/ Generator			
Pulse amplitude	Impedance	Pulse rise time	Pulse duration	Pulse modes	Repetition	Battery supply activation	Pulse monitor
10 to 600V In 1V steps	2/ 4/ 10/ 50Ω (pulse 1/2) 60μs (pulse 6) and external	1/3μs (pulse 1/2) 60μs (pulse 6)	50/ 200/ 500/ 1000/ 2000μs (pulse 1/2) 300μs (pulse 6)	Single, continuous programmed 1 to 99999	0.2 - 15s resolution; 0.1s	Program-controlled Voltage-controlled Battery off to pulse time 2μs	1:100, BNC

Pulse 3a/3b Generator

NSG 5003

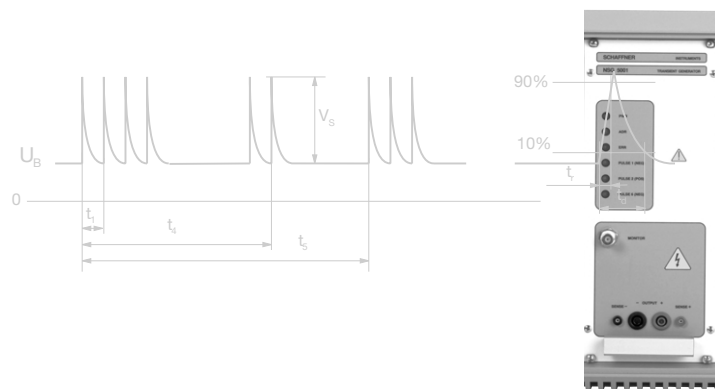
- Burst specifications to ISO / SAE / etc.
- Splendid test margins
- Output to coupling clamp

Fast transient interference signals injected onto a vehicle's wiring harness through switching of associated peripheral devices can affect the correct functioning of adjacent electronic units.

In conformance with the standards, the NSG 5003 simulates these interference phenomena by means of pulse bursts. The vibrant development of electronic devices for the automotive industry means that better and faster test methods are demanded continually, particularly in the field of EMC.

These increasing demands are more than met by the NSG 5003 - its technical properties exceed the specifications laid down in the standards by a number of factors. Considerably higher pulse voltages, burst frequencies and pulse burst specifications are just part of it; there are also automated functions for weak spot analyses and long-term trials.

The EUT connection, as well as the separate connector for the coupling clamp used in data line tests, have been optimised to suit the high frequency conditions prevailing in such a fast pulse environment.



Brief Specifications				NSG 5003 Pulse 3a/3b Generator			
Pulse amplitude	Impedance	Pulse rise time	Pulse duration	Burst Frequency	Pulses per burst	Burst repetition	Pulse modes
20 to 800V In 1V steps	50Ω	5ns	100ns into 50Ω	1 to 100kHz in 0.1kHz steps	1 - 200	90ms to 99.9 seconds in 10ms steps	Single, continuous programmed 1 to 99999