

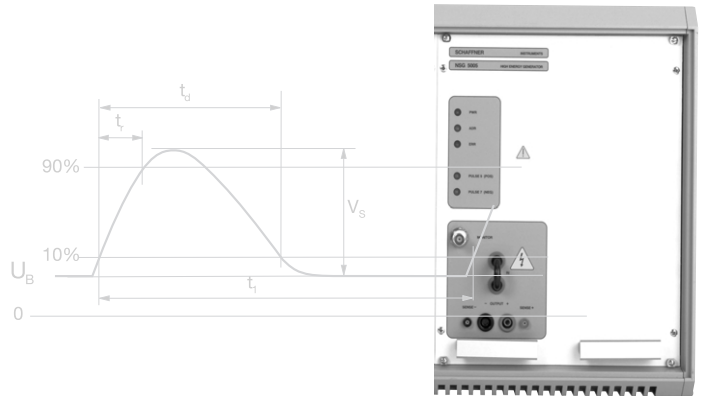
High Energy Pulse Generator

NSG 5005

- Load dump pulse to ISO / SAE / EN / etc.
- Active amplifier design
- High energy in a compact unit

Supply attenuators produce a high energy (load dump) pulse on a vehicle's power harness when the battery is disconnected. The NSG 5005 simulates the corresponding pulse 5, specified by both the ISO and SAE, as well as the additional pulse 7 defined by the ISO.

Some vehicle manufacturers have expanded upon these specifications - in most cases by making them more stringent. The generator takes this into account. Contrary to the classic concept, the unit is built around an active amplifier circuit. This enables much greater variability of the pulse parameters to be achieved and facilitates better reproducibility. Impedances are emulated electronically by dynamic current limiting, ensuring that the required pulse energy is driven optimally into the EUT.



An impedance box is available as an option (INA 5025) which sets up the generator impedance by means of hardware, using power resistors.

As an alternative, a current load dump generator is available. Its controlled pulse source, consisting of a 200mF capacitor delivers load dump currents up to 120A.

Brief Specifications				NSG 5005 High Energy Pulse Generator			
Pulse amplitude	Impedance	Pulse rise time	Pulse duration	Pulse repetition	Pulses modes	Pulse monitor	INA 5025 hardware hardware impedances
20 - 200V in 0.5V steps	Equivalent to 0.5 - 10Ω through dynamic current limiting	5 - 10ms	40/ 100/ 150/ 200/ 250/ 300/ 350ms	15 - 600s in 0.1s steps 400ms	Single, continuous, 1 - 99999	1:100, BNC programmed	0.5 to 10Ω in 0.25Ω steps

High Current Coupler

CDN 5010

- Optional high current extension
- EUT supply up to 42V / 60A
- Overcurrent protection

Use of more electrical automotive components leads to high current loads being placed on a vehicle's supply harness.

The CDN 5010 coupler expands the current range up to 60A. Installed in a separate housing, the coupler integrates seamlessly into the overall concept. All the standard control functions are retained, with the EUT being protected by an over-current trip switch.

The System 5000 can be expanded by adding the high current coupler at any time.



Brief Specifications			CDN 5010 High Current Coupler	
Instrument power supply	EUT power supply	Load inductance	Dimensions	
100 to 120Vac ± 10%, 47 to 63Hz 220 to 240Vac ± 10%, 47 to 63Hz	From an external source 4 to 42 Vdc/60A max. continuous Switching under software control 60A safety cut-out	300mH max.	19" benchtop housing, can also be rack-mounted Height 19cm (7.5") Depth 51cm (20")	