

NPG30PN12, NPG30P12 and NPG30N12 two-channel nanosecond pulse generators with precise, controllable channel-to-channel delay

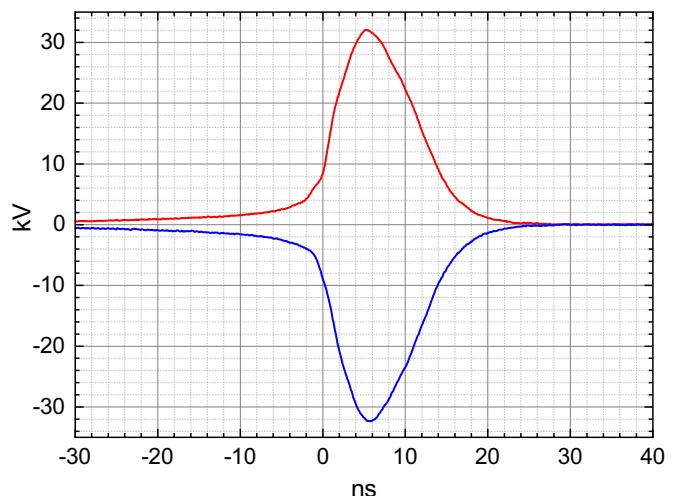


- DSRD semiconductor technology ensures stable output pulse waveform, high reliability, efficiency, and long operation life-time
- Two HV channels; more energy in each pulse to scale up your discharge setups
- Continuous and burst modes, both channels simultaneously and one channel operation
- Digital control of pulse energy, frequency, number of pulses per burst, and channel-to-channel delay
- Precise, controllable channel-to-channel delay with 0.25 ns increment and 0.1 ns jitter

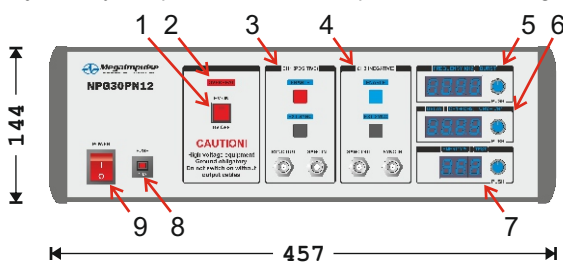
Increase the volume of discharge and productivity of your installations, as well as discover new research abilities with powerful two-channel nanosecond pulse generators with precise, controllable channel-to-channel delay. Up to 120 kV differential pulse voltage can be obtained when two channels operate synchronously on a common floating load. The pulse energy can be smoothly adjusted from 48 mJ to 120 mJ. The frequency can be set from 1 Hz to 1 kHz in continuous mode and up to 50 kHz in bursts. The channel-to-channel delay (skew) can be set within -54 ns ... +54 ns with 0.25 ns increments. Smart digital control allows operation in continuous and burst modes, both with internal or external triggering, as well as prevents possible damage to equipment due to improper external triggering. The generators can operate on any load, including discharge reactor.

- Amplitude adjustable 19...30 kV@75Ohm
up to 60 kV on discharge
up to 120 kV differential between channel outputs
- Polarity positive+negative (NPG30PN12)
both positive (NPG30P12)
both negative (NPG30N12)
- Rise time less than 5 ns, fixed
- Width (FWHM) approx. 10 ns, fixed
- Pulse energy 48...120 mJ, adjustable
- Repetition rates and operation modes:
continuous from 1 Hz to 1 kHz
burst from 1 Hz to 50 kHz
single pulse in ext. triggering only
- Burst length from 1 to 1000 pulses
- Channel-to-channel delay -54 ns ... +54 ns
- Delay increment 0.25 ns
- Jitter (RMS) 0.1 ns (typical)
- Output power up to 120 W per channel
- NPG30 special type HV output connectors
- Power supply AC 110...230V / 50...60 Hz

*) jitter may be up to 2 ns in case of operation on discharge



NPG30PN12 pulse waveforms on matched 75 Ohm load, the channel-to-channel delay is set to 0 ns.



- 1 - HV ON/OFF push button with ON state LED indicator
- 2 - Overheat LED indicator
- 3, 4 - Channels 1 and 2 controls, including ENABLE button with LED indicator, EXT SYNC button with LED indicator, BNC-type SYNC OUT and SYNC IN
- 5 - FREQUENCY and number of pulses per BURST 4-digit display, LED indicator and regulation knob
- 6 - DELAY 4-digit display, LED indicator of CH1→CH2 or CH2→CH1 delay modes and regulation knob
- 7 - Output pulse energy 3-digit display, LED indicator of ENERGY / TEST modes and regulation knob
- 8 - Electronic fuse
- 9 - Main power supply ON/OFF toggle switch