

# NPG30P11 and NPG30N11 high voltage burst mode nanosecond pulse generators

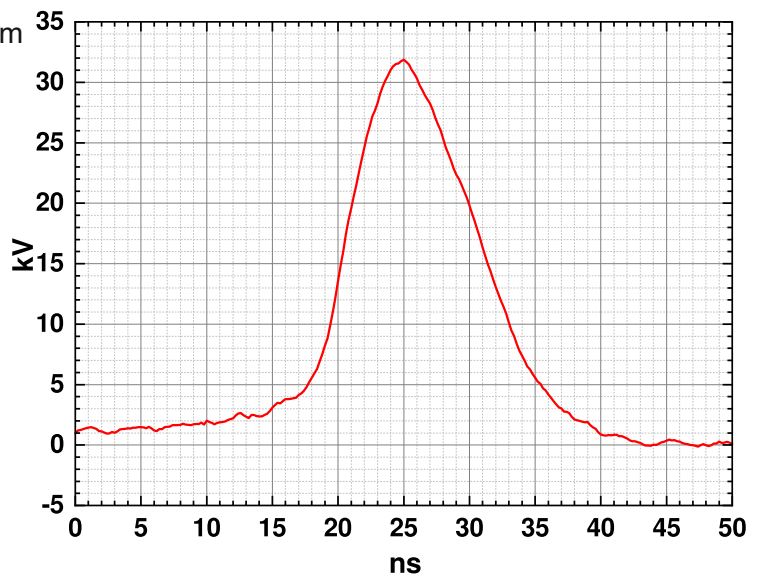


- More energy in each pulse to scale up your discharge setups; pulse energy is four times higher than that of NPG18-series
- Operation in continuous and burst modes
- Digital control of the pulse energy, frequency, and number of pulses per burst
- DSRD semiconductor technology ensures stable output pulse waveform, high reliability, efficiency, and long operation life-time

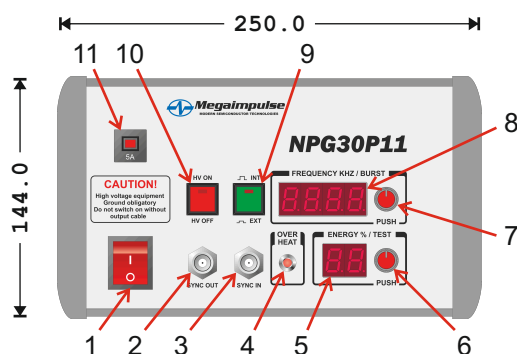
Increase the volume of the discharge and productivity of your installations with more power nanosecond pulse generators of positive (NPG30P11) or negative (NPG30N11) polarity. The pulse energy can be adjusted smoothly from 30 mJ (which is the max level for the NPG18-series) up to 120 mJ. The frequency can be set from 1 Hz to 1 kHz in continuous mode and up to 50 kHz in a burst. The rise time and the pulse width are fixed. Smart digital control allows operation in continuous and burst modes, both internal and external triggering, as well as prevents possible damage to the equipment in case of improper external triggering sequence. The generators can operate with any type of the load including discharge reactor, open and short loads.

Amplitude adjustable 15...30 kV@75Ohm  
 up to 60 kV on the discharge  
 Polarity positive (NPG30P11)  
 negative (NPG30N11)  
 Rise time less than 5 ns  
 Width (FWHM) 11...12 ns, fixed  
 Pulse energy 30...120 mJ, adjustable  
 Repetition rates and operation modes:  
   continuous from 1 Hz to 1 kHz  
   burst from 1 Hz to 50 kHz  
   single pulse \*)  
 Burst length from 1 to 1000  
 Output power up to 120 W  
 Internal delay 1.2  $\mu$ s or less  
 Jitter (RMS) 1 ns (typical)  
 Internal and external triggering  
 NPG30-type HV output coaxial connector  
 SYNC IN and SYNC OUT BNC connectors  
 Power supply AC 110...230V / 50...60 Hz

\*) single pulse mode for the external triggering only



NPG30P11 pulse waveform on matched 75 Ohm load



- 1 - Power supply ON/OFF toggle switch
- 2 - BNC-type SYNC OUT connector
- 3 - BNC-type SYNC IN connector
- 4 - Overheat LED indicator
- 5 - Output pulse energy 2-digit display
- 6 - Output pulse energy regulation knob with push button
- 7 - Frequency and number of pulses per burst regulation knob with push button
- 8 - Frequency and number of pulses per burst/second 4-digit display
- 9 - Internal/external triggering push button with LED indicator
- 10 - High voltage ON/OFF push button with ON state LED indicator
- 11 - Electronic fuse