**8-CHANNEL HIGH VOLTAGE WAVEFORM GENERATOR WFG600**

WFG600 Waveform Generator produces arbitrary trains of pulses simultaneously on 8 channels. The pulses have high voltage and fast rise times. WFG600 is controlled from a PC through an intuitive, yet powerful user interface. Both amplitude and width are defined for each pulse and can be modified by several methods - the simplest by a click-and-drag. Complex changes of multiple pulses and waveforms can be obtained by a single click, after defining their mutual relations. The unique double-memory design allows for transient-free modification of waveforms during operation.

**General specifications**

**Operating modes**
- Continuous
- Continuous with frame counting
- Burst one frame
- Burst one frame with waveform inversion
- Burst N frames
- Burst N frames and roll waveforms
- Script - programmable multiple burst with waveform rolling
- Script - programmable multiple burst with reloading waveforms
- Multiplexing an electrode matrix

**Outputs**
- Two BNC contacts for the high-voltage output on each channel
- Pulse-related control bit (TTL level) individually on each channel
- Oscilloscope trigger pulse (TTL level, multiple trigger points possible)
- Low-voltage superposition of two chosen waveforms

**Inputs**
- External clock
- External trigger
- External start/stop control
- Direction control

**Interface**
- Serial (RS232), 57600 baud, 8-N-1

**Timing**
- Time base clocks:
  - 20 MHz (crystal controlled, 1 time unit = 50 ns)
  - 1 MHz (crystal controlled, 1 time unit = 1 µs)
  - 1 kHz (software controlled, adjustable in multiples of 1 ms)
- External pulse
- Amount:
  - Max number of pulses 12288

**Amplitude**
- Range: ±100 V, 185 mA each channel; settled amplitude is independent of the load within output current limit
- Resolution: 12 bits, i.e. 50 mV at high voltage output; ±1 LSB accuracy (limited by settling time)
- Speed: slew rate ca 300 V/µs at 400 pF load; output impedance <0.1 Ω; load resistive || capacitive