Products - FPG series - FPG-X Multi-Channel Pulsers

In certain cases a high voltage nanosecond or picosecond pulse should be applied to a sustained load or simultaneously to several loads. FID GmbH has developed FPG-X multichannel pulsers for these applications. FPG-X pulsers are manufactured in both desktop or rack mount housings and are convenient for laboratory or industrial use. FPG-SP series includes all common features ofFPG series.

Output channels of FPG-X series pulsers can be synchronous (dependent) or asynchronous (independent). Delay time between asynchronous channels can be fixed or user-adjustable. Both synchronous and asynchronous channels can be switched on and off in any combination.

Multichannel pulsers with synchronous channels are generating output pulses at all channels using a single forming switch. As a result, all channels produce the same waveform, timing jitter between the channels is less than 20 ps. There is no long time drift (that usually appears because of the heating processes inside the generator) of the delays between the channels.

Multichannel pulsers can have all specifications of FPG-N, FPG-P and FPG-SP series.

The following table of reference models of pulse generators will help you to estimate FID GmbH possibilities.

Series	Output voltage	Rise time	Pulse width	Max pulse repetition frequency	Channels	Size (mm)	Lead time (months)
FPG 1-NX	1 kV	> 1 ns	2 - 5 ns	100 kHz	10	400x400x160	4
FPG 5-NX	5 kV	> 1 ns	2 - 5 ns	100 kHz	5	400x400x160	4
FPG 10-NX	10 kV	> 1 ns	2 - 5 ns	100 kHz	5	400x400x160	4
FPG 50-NX	50 kV	> 1 ns	2 - 3 ns	10 kHz	2	400x400x160	4

All specifications are given at 50-100 Ohm
Total efficiency can be 60-70% at the pulse width from 1 to 3 ns
Pulse duration is given at 50% of amplitude, other pulse widths are possible
Dimensions and lead time are approximate

Please also visit our Applications section, which describes pulse generators developed for specific fields of use.