



**montena**

montena emc sa

# High Voltage Pulse Generator



These very short rise time pulse generator use only solid state switches. The peak output voltage can reach 20 kV or 30 kV on 50 ohm. The rise time is 130 ps and the duration 600 ps. A BNC 50 ohm connector produces triggering signals when the generator is internally triggered (internal mode). When the generator is in external mode, the HV pulse is only delivered when a synchronisation signal is present at this connector. In internal trigger mode, the repetition frequency is adjustable by a rotary knob up to 10 kHz, respectively 1 kHz. The output voltage is also adjustable by a rotary knob.

## SPECIFICATIONS

Type	GP20-01-2	GP30-01-2
Maximum output voltage	20 kV (on 50 ohm)	30 kV (on 50 ohm)
Peak current	400 A (on 50 ohm)	600 A (on 50 ohm)
Impedance	50 ohm	50 ohm
Rise time 15 - 95 %	130 ps +/- 10 ps	130 ps +/- 10 ps
Pulse width at 50 %	600 ps +/- 100 ps	600 ps +/- 100 ps
Jitter	30 - 40 ps	30 - 40 ps
Pulse repetition frequency	≤ 10 kHz	≤ 1 kHz
Lifetime of the generator	> 10 <sup>11</sup> pulses	> 10 <sup>11</sup> pulses
Max. power into the load	50 - 70 W (at 10 kHz)	100 W (at 10 kHz)
Connector type	HN (other on request)	HVMEM50K
Triggering	internal or external BNC connector 50 ohm	internal or external BNC connector 50 ohm
Trigger signal	TTL, rise time 5-10 ns, pulse width 100-1000 ns	TTL, rise time 5-10 ns, pulse width 100-1000 ns
Cooling	air	air
Power supply	100 - 240 V <sub>ac</sub> / 200 W	100 - 240 V <sub>ac</sub> / 300 W
Weight	10 kg	14 kg
Size (L x W x H)	48 x 45 x 12 cm (19" housing)	48 x 45 x 12 cm (19" housing)

*Other models are available on request.*