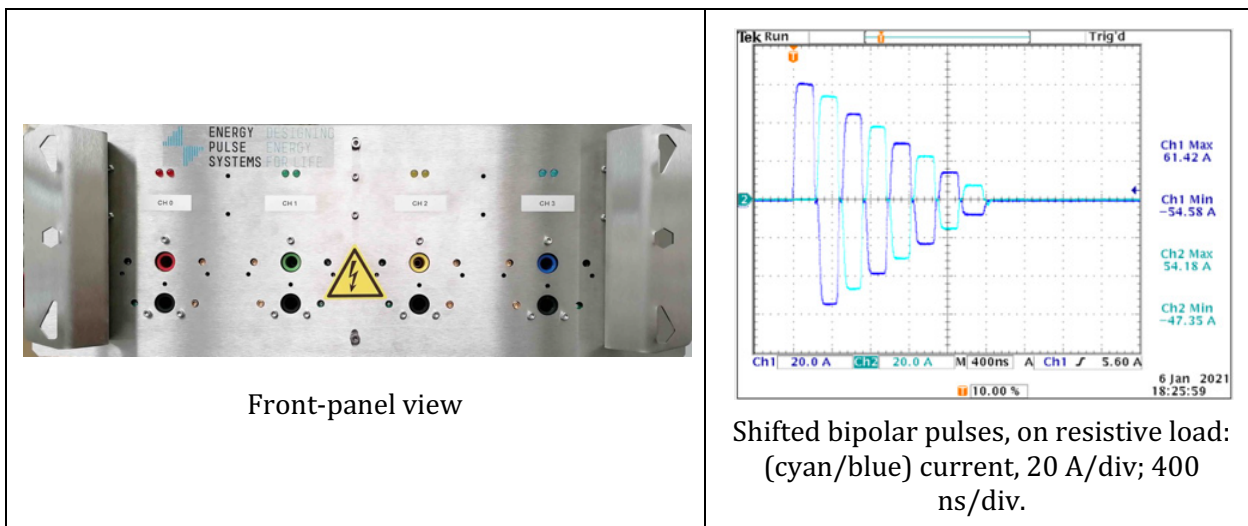


Generator EPULSUS-FPM4-10

EPULSUS®-FPM4-10 is a high-performance pulse generator that incorporates four independent positive Marx modulators, based on SiC MOSFET technology, designed especially for biomedical applications, capable of unipolar and bipolar, asymmetric, operation. The equipment is controlled by a PC graphic interface, with overcurrent protection and U/I monitoring.



Front-panel view

Shifted bipolar pulses, on resistive load:
 (cyan/blue) current, 20 A/div; 400 ns/div.

Main Specifications

Input	
Voltage & current	110Vac or 230 Vac, single phase with ground
Output	
Maximum voltage	10000 V (pulsed) in four channels
Pulse polarity	Positive
Maximum current	50 A (pulsed) in four channels
Maximum power	< 200 W
Maximum frequency	2.5 MHz between burst pulses, limited by power
Pulse rise time	Below 100 ns for 12 kV and 50 A pulses
Maximum Stored energy	4.6 J at 10 kV output, in each Marx modulator
Pulse width	200ns to 100µs, with 50ns steps (limited by load current)
Time between pulses	200ns to 100µs, with 50ns steps (limited by load current)
Pulse duty cycle	Limited by maximum power
Burst mode	The generator operates in burst mode from 1 to 100 pulses, which can have a repetition frequency from 1 to 10 kHz
Protections	Output overcurrent protection above 55 A
Cooling	Internal forcer air
Environment	
Operation & Storage	0 to +45 °C & 0 to +85 °C
Humidity	90 %, non-condensing
Ingress Protection	IP20
Size (LxWxH)	19 inch rack, 4U, 506x430x174mm3
Weight	21 kg
Installation/orientation	Horizontal with sufficient spacing for ventilation