

EPULSUS@-LPM1-10

Advantages

- 10kV/240A output positive square pulses
- Flexible pulse width and frequency operation
- High efficiency
- 2kW maximum output power
- Resistive and capacitive loads
- 800x600x400 mm, 80 kg package
- Air cooled and IP54 index
- CE Marked
- Short-circuit protection



Description

The EPULSUS@-LPM1-10 is a positive Marx Modulator designed with state-of-the-art semiconductor technology, projected for almost square-wave voltage pulse generation into resistive and capacitive type loads, in laboratory to pilot-plant experiments.

Specifications

INPUT

Voltage	190 to 260 V _{AC} , 1PH, 50/60 Hz
Current	15 @ 230V _{AC}
Power factor	>0.98
Power	2200W

PULSE FLEXIBILITY

1 to 200Hz	
2µs to 200µs	300ns rise time

PROTECTIONS

Over temperature	70°C
Over-current	240A, slow
Short-circuit	300A, fast
Safety interlocks	
Reset	After power-on

CONNECTIONS

HV cable	3m URM67
Output Ethernet plug	Optional
Other	External control 24V signal

LAYOUT

Size	800x600x400mm ³
Weight	80kg

OUTPUT

Voltage	Up to 10000V
Power	2000W
Current	240A
Polarity	Positive

PULSE MODE

Single-pulse	One-shot
Multi-pulse	1 to n pulses
Continuous	

REGULATIONS

	CE Marked
	EN55011
Isolation	4000V _{AC}
Leakage current	< 500µA

ENVIRONMENT

Operation temp	10°C – 40°C
Storage	- 20°C – 60°C
Humidity, max	90% non-condensing
Cooling	Forced air (fan included)

STORED ENERGY

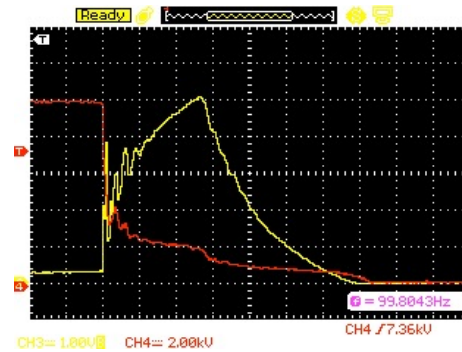
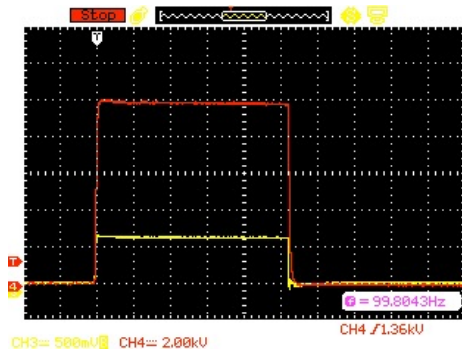
800J

Touch-screen

Programming
 Voltage programming
 Frequency programming
 Pulse width programming
 Pulse mode

Monitoring
 Input voltage
 Output voltage
 Output current
 Output power
 Temperature
 Fault conditions

OUTPUT Voltage vs Current



Left, a typical 10kV/60A pulse waveform on a 100Ω resistive load, 26µs width pulse and 100Hz repetition rate. Right, a short-circuit situation, during a 10 kV pulse, where the current rises to 500A during 1.3µs, after which the circuit turns off.

Red line: voltage 2kV/div; Left yellow line: current 50A/div and 5µs/div; Right yellow line: 100A/div and 500ns/div

Outline drawings

