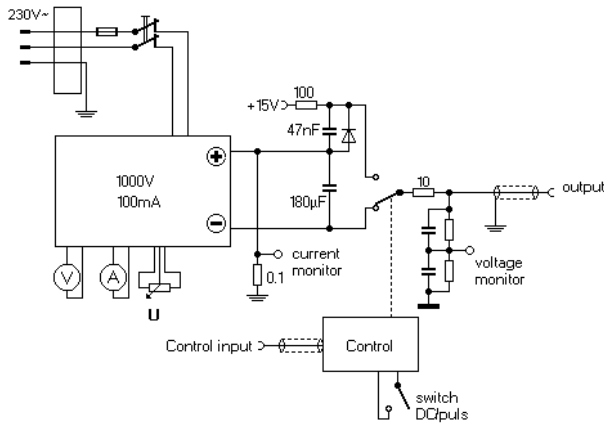


RUP6-1L

1000V pulse generator for smaller output power

The pulse generator RUP6-1L is a smaller pulse generator which can be used for magnetron sputtering, PVD, and a lot of other applications. It can be operated with burst frequencies up to 100kHz, a voltage in the range 0...-1000V and an average power of 100W. The peak output current is limited by a 10 Ω resistor.

Technical data



principal scheme RUP6-1L

Voltage and Current

- output pulse voltage up to -1000V. In the state „pulse off“ there will be a slightly positive voltage (+15V, current limited by a 100 Ω -resistor) at the output.
- Internal power supply: Voltage 0...-1000 V, maximum current 100 mA, maximum power 100 W.
- Peak current up to 100A in case of short circuit. For regular operation however it is recommended to keep peak currents in the range 5-10A.
- The output current is limited only by an internal 10 Ω power resistor, which is able to absorb the full power of the device. There is no further arc or overcurrent detection. Therefore it is possible to operate the device also with pure capacitive load up to maximum power.

Wave form and frequency

- Square wave pulse, rise and fall times in the range 200 ... 500 ns.
- The output pulse follows the input TTL control signal
- Duty cycle is possible in the range 0% ... 100%.
- The maximum average frequency is 1 kHz. In burst mode, with up to 100 pulses also

frequencies up to 100 kHz are possible.

- The device can also be switched to DC mode, so that it can be used as DC power supply without control signal.

Mechanical, included items

- 19" rack insert, 5HE, 460mm deep.
- grid supply 220-240 V, single phase.
- ground screw.
- Analog meters for voltage and average current.
- 10 turn potentiometer for adjustment of voltage.
- BNC plug for control signal.
- Switch pulse operation-DC
- voltage monitor output 1:100
- current monitor output 100 mV/A
- High voltage output type N plug on the rear side.
- 3m output cable (RG58) included.
- Manual.

Environmental

- Operational temperature range 5-35 $^{\circ}$ C
- Humidity 0-80%, the pulse generator is intended for operation in dry laboratory rooms.
- protection class I, IP20
- Supply 220V-240V~, 2A max.

Safety

- The pulse generator is protected by the output resistor and temperature sensors from arcs and short circuit
- Peak current 100 A, maximum RMS current 3A.
- The pulse generator, correctly connected, is conformal to regulations about electromagnetic compatibility (EMC). The output cable shield serves as rear conductor and must be connected to the load.
- It is the responsibility of the operator to make sure that the output cannot be touched in operation.

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