

GIPO Series

High voltage pulse generator (*stand alone unit configuration*)



Patented – Under licence from the French "Commissariat à l'Energie Atomique" (C.E.A.)

1 standard model

Pulse rising edge : 2.5ns typically on a load of 2pF

Vout : -500V to -5.5kV

Vin : 24Vdc

Reference : GIPO-24N552106-10



General Description

◇ The GIPO product is basically composed of an adjustable high voltage dc/dc converter and a high speed, high voltage switch. The stability of the high voltage power supply integrated in the module is very high (10ppm/°C). This amplitude of the output signal is programmed with a 0/10pv input. HV pulses are triggered by an external trigger 0/15V on the SMA connector. The GIPO is able to switch 5.5kV in less than 3ns. Pulse width, voltage and repetition rates can be adjusted by the user. This equipment is fully qualified and has been tested by some of the most important players in the optical and photonics domain.

Parameters	Specifications
Input voltage Vin	24 V ± 2 V, (Max. 30V) power 6 W
Output voltage vout	Continuously adjustable from -500V to -5500V
Pulse rising edge	2.5ns typically on load of 2pF
Outout signal width	Continuously variable from 1µs to 30µs
Jitter	<200ps
Repetition rate	Up to 100Hz
Polarity	Fixed negative
Pulse triggering	Input signal trigger, type CMOS 15 V on 50 Ohms
Output voltage setting	Voltage setting via external 0/10 V voltage source Input impedance > 1Mohm
Output voltage monitoring	DC analogue 0/10V buffered output signal, advised maximum output current 5mA
Input connector (power supply, command and monitoring)	a SUBD 9 male plug
Pulse output connector	BNC High Volt safety RADIALL R317-580
MTBF	>700800 hours @25°C



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Parameters	Specifications
Safeguards	24V input protected toward polarity inversion input for voltage setting is internally limited at 10V Monitoring output is protected toward shortcuts Repetition rate is internally limited at 100 Hz 50 ohm resistor on the synchronization accepts 15V dc Pulse output on BNC High Voltage safety
Casing material	Aluminium case : 105 mm x w :80 mm x h : 36 mm with six holes cast into the flanges
Temperature	Storage: -10/+70°C, Operating: 0/+40°C

Possible applications

- Flash Lamps Triggers
- Intensified CTDs
- LaserDodes Drivers
- Multi Channel Plates



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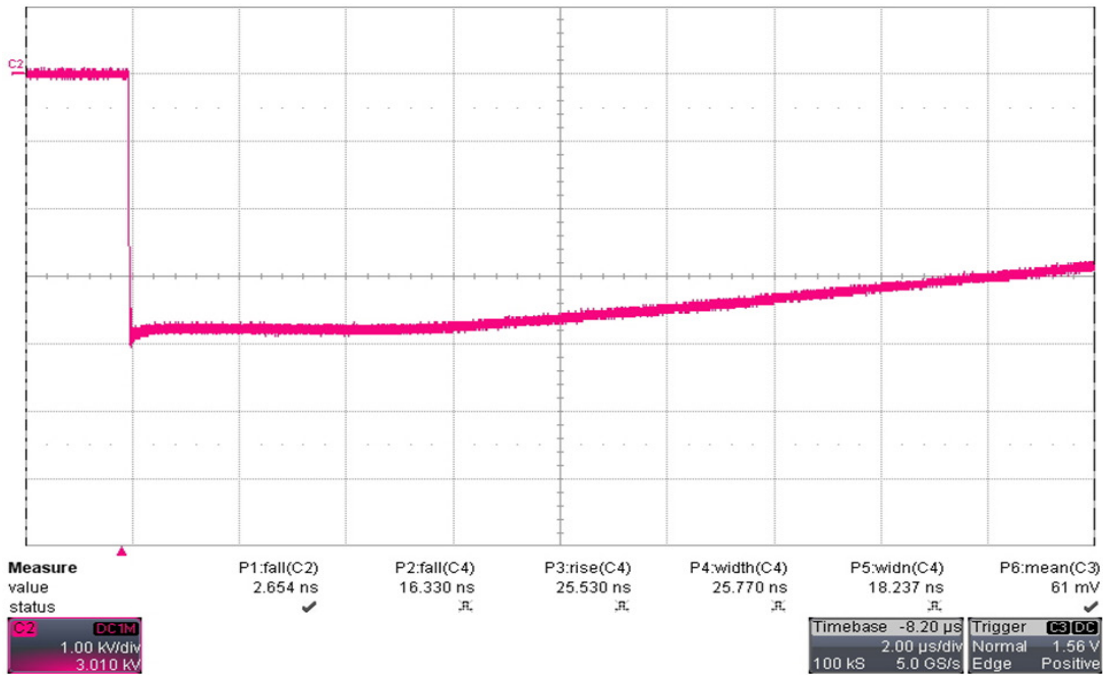


Fig.1 : overall view

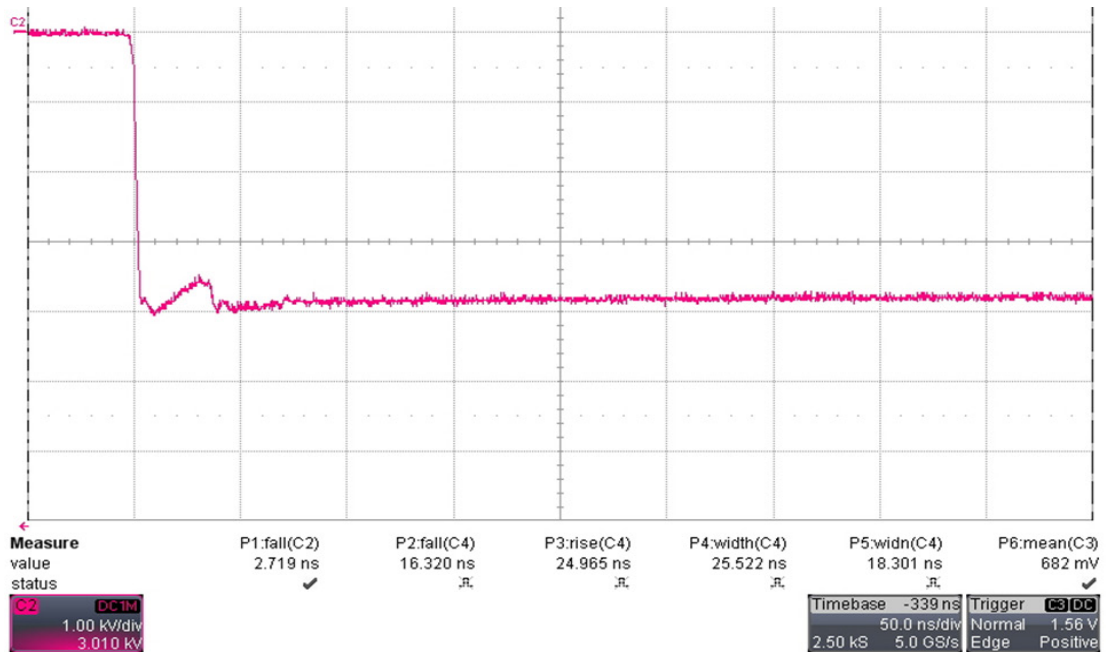
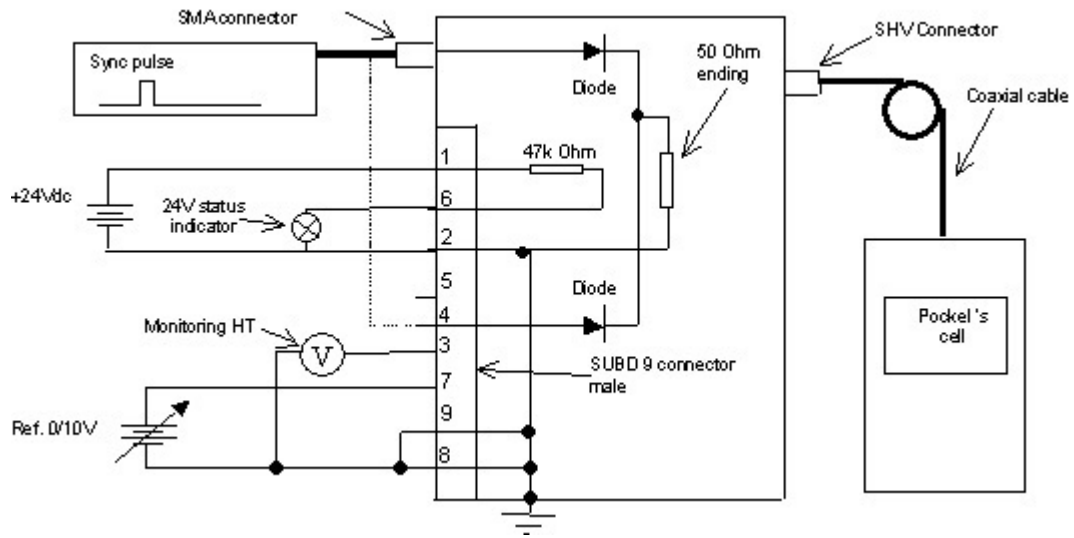


Fig.2 : detail of the falling edge



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Functional diagram

