



Summary

This is a fast rise high voltage pulse source that can drive >8kV into 50 Ω . It will find applications in Ultra Wideband Radar Pockels cell driving etc.

Standard Options

- /P Positive output.
- /N Negative output.
- /D Internal repetition rate and delay generator.
- /F 1kHz maximum repetition rate.
- /V Variable output amplitude down to 60% of the normal output.
- /S Output pulse forming.

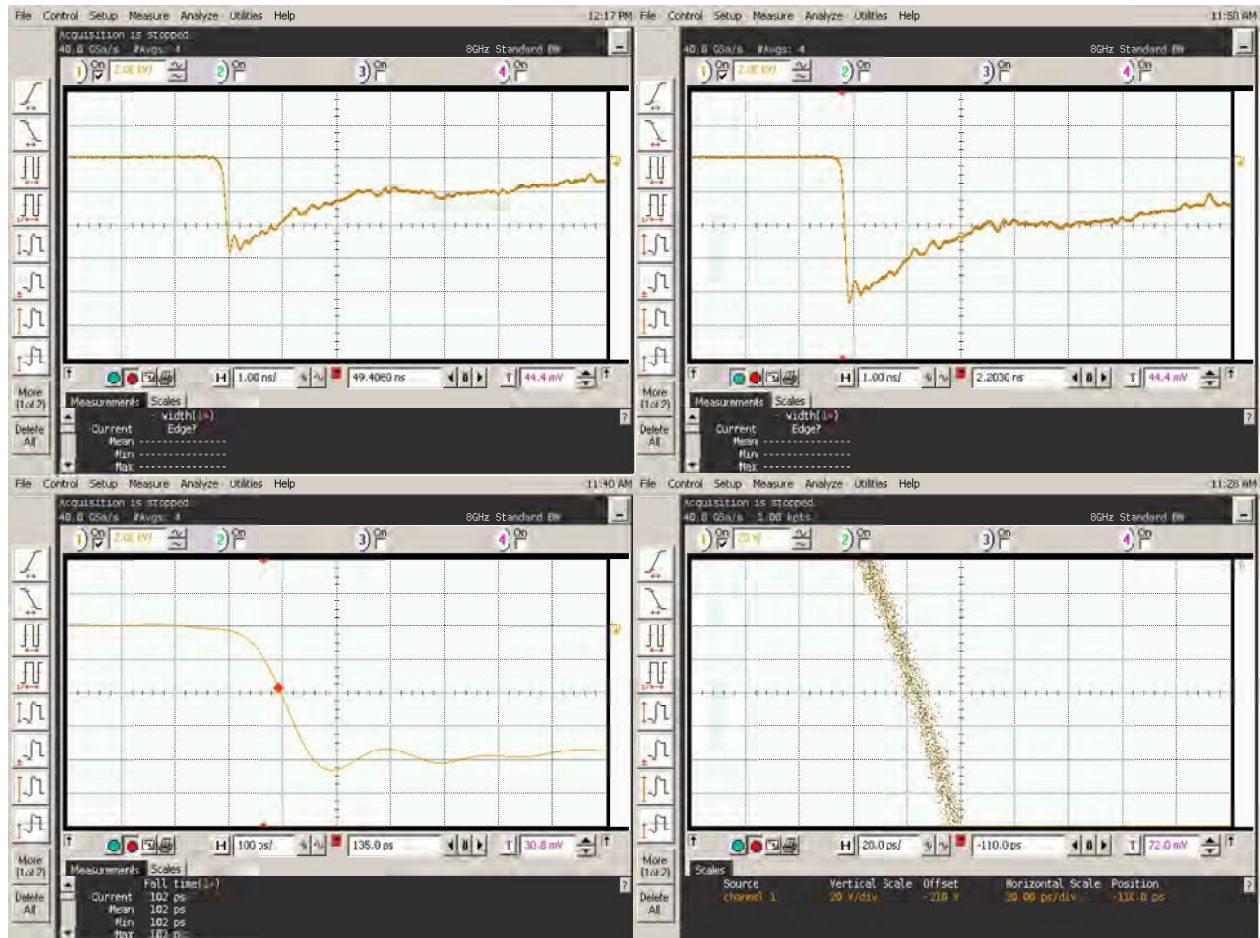
Special Options - Please consult our factory to discuss these.

- Multiple outputs with very low relative jitter.
- Output impedances from 1 Ω to 100 Ω .
- Remote control.

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Minimum amplitude (~ 5.5kV)

Maximum amplitude ~8.5kV



Fall time ~102ps

Jitter ~10ps

SPECIFICATIONS

General:

Output voltage	Approx. 5kV to >8kV, 50 .
Pulse shape	Fast rise, slow decay.
Pulse risetime	Approximately 100ps (10 - 90%).
Pulse Width	Approximately 3ns FWHM.
Polarity	Negative.
Trigger	Requires 5V into 50 , ~5 ns rise time.
Jitter	<10 ps RMS.
Trigger delay	~30ns (trigger in to output) in direct mode.
Repetition rates	Single shot to 100 Hz.
Power supply	85 to 240V AC 50 to 60Hz.

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Outputs:

Pulse output	HN 8kV pulse.
Pretrigger output	BNC 10V into 50 Ω , leads main output by the delay when the delay is active.
Monitor output	BNC 10V into 50 Ω , after delay (i.e. fixed timing with respect to main output).

Inputs:

Trigger	BNC 5V, 50 Ω .
Remote amplitude	Lemo type 00 0 to 10V.
Inhibit (delay active)	BNC +5V into 2k2 Ω , 0V or open circuit enables.

Controls:

Local amplitude	Single turn potentiometer.
Local/Remote Mode	Toggle switch selection. Sets one of the following modes: Internal trigger Single shot (delay active) Internal trigger 0.01-0.1Hz (delay active) Internal trigger 0.1-1Hz (delay active) Internal trigger 1-10Hz (delay active) Internal trigger 10-100Hz (delay active) External trigger (delay active) "Delay" External trigger (delay inactive) "Direct"
Fine rate	Varies internal rate by a ratio of 10:1.
Delay	Sets internal delay, up to 100ns pretrigger delay.
Fine delay	Adjusts internal delay by approximately 12ns.
Single shot button	Depressing this button cause a single trigger when single shot mode selected.
Power	Switches AC power in the pulser.

Indicators:

Power	Shows that AC power is applied and the unit is switched on.
Triggered	Illuminates while the unit is being triggered.

Environmental:

Dimensions:	H = 135. W = 450mm. D=305mm (350mm with handles).
Weight:	4.0kg approx.
Ambient temperature	5 to 35 degrees C
Humidity	< 95% non-condensing
Altitude	< 3000m

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