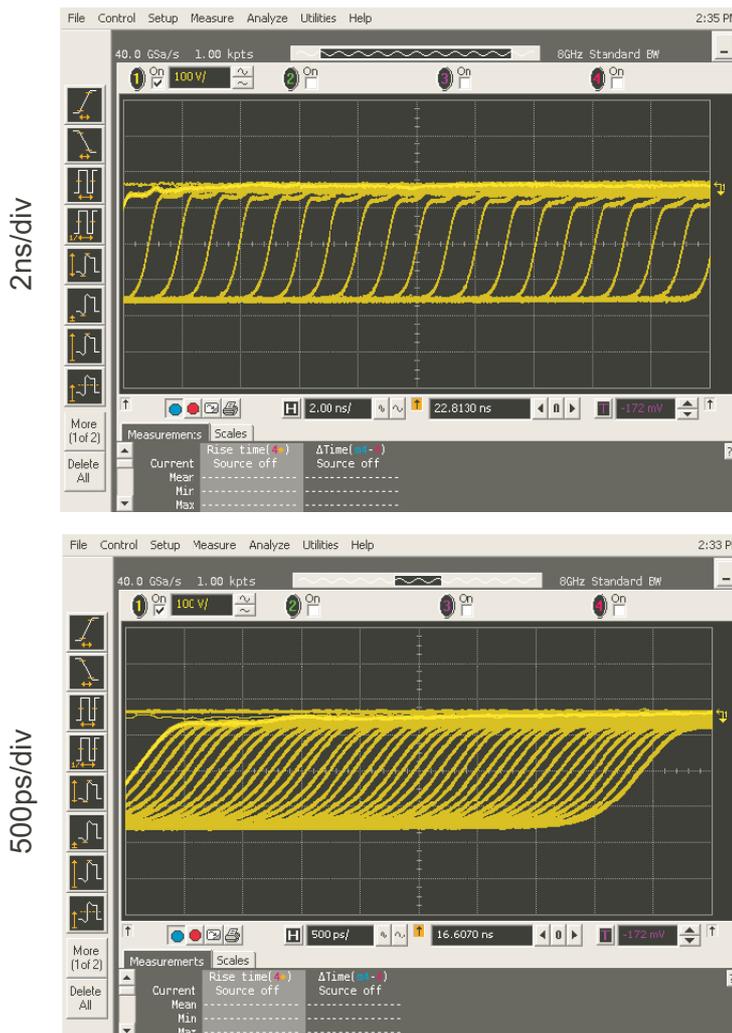


## PDG Precision Delay Generator

### Applications

- Trigger timing control and synchronisation
- Fast camera timing
- Phased array antenna systems



Switched transmission line passive delay unit

20 ns delay adjustment

25 ps nominal steps

Zero effective jitter

Thermal drift approx 1 ps per degree Celsius

High level signal capability  
approx 1kV for 1ns pulse width

< 1ns risetime at maximum delay

Local or remote control

Remote control by RS232

### Options

50 ns delay adjustment

Ethernet Adaptor

See [www.kentech.co.uk](http://www.kentech.co.uk)

# Kentech Instruments Ltd.

3RD. NOVEMBER 2008

incident pulse



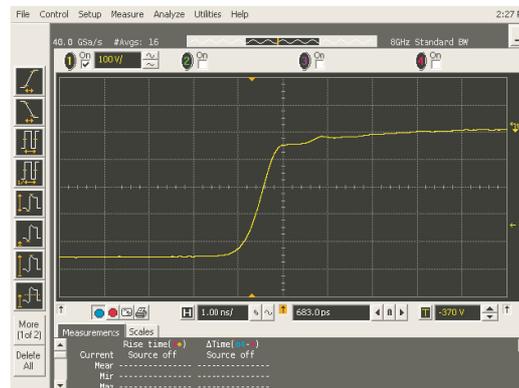
transmitted pulse with delay set to 0ns



## SPECIFICATION

- Maximum delay adjustment 20ns
- Incremental delay step 25ps nominal
- Typical throughput delay at minimum setting 6ns
- Interstep error  $<\pm 0.5$  steps, but reproducible
- Jitter effectively zero, mechanical device
- Characteristic impedance 50W.
- Voltage handling D.C. 30 volts.  
With pulsed signals up to 30 volts the delay may be changed whilst the signal is propagating through the device.  
If the delay setting is not changed whilst the pulse is propagating, the pulse is limited to 1.8mamp coulombs.  
e.g. 1.5kv for 2ns.  
1.5kV is the maximum recommended voltage even for very short pulses.

10ns



20ns



- Fully functional controls via front panel keys and serial port.
- LCD display of status and functions.
- Serial port RS232, 75 to 9600 baud, (rate is stored in EEPROM), requires simple text commands from a terminal or emulator.
- Delay Absolute or relative.
- Memory Nonvolatile memory of last manual delay setting and relative or absolute delay mode, absolute minimum delay and baud rate. (Note that when powered down the delay will revert to the minimum but the signal will still be transmitted.)
- Size 270 x 210 x 87 mm<sup>3</sup>
- Power requirements 110 to 240V AC at approximately 20 watts.

See [www.kentech.co.uk](http://www.kentech.co.uk)