



GFT7012

1.15GHz Generator with Phase Shifter

Features

- 8 independent delay channels
1ps time resolution
< 10 ps jitter for internal triggered delays
- Output pulse 0.5 to 10V, 3 ns rise time in 50Ω
- Internal or External clocking up to 100 MHz
- Independent control of delay, width and amplitude
- Controlled via Ethernet and front panel



Applications

- Components test
- ATE application
- System Laser timing control
- Control flash lamps and Q-Switches
- External clock frequency (Mode locked laser)
- Precision pulse Application
- Gate high Speed Cameras

Description

The GTF7102 Digital delay Generator provides 8 independent delayed pulses on the front panel. Delays up to 10 seconds can be programmed with 1ps resolution and channel to channel jitter is less than 10 ps rms. BNC outputs deliver up to 10V, 3ns under 50Ω. Pulse amplitude and width are adjustable on each output channel.

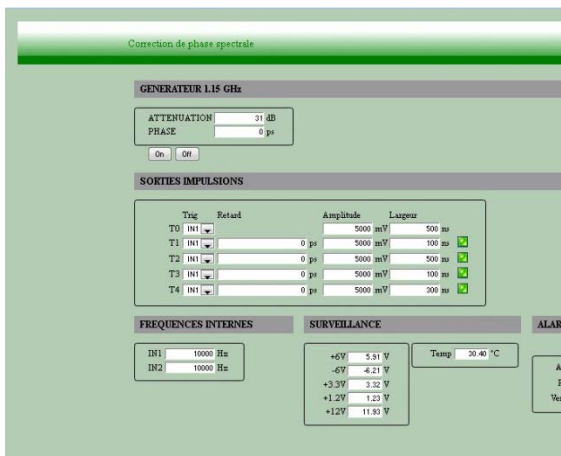
One input channel (TRIG IN), or two internal synchronized timers, or software command is used to trigger all output channels.

GFT7102 parameters are remote controlled via Ethernet.

Control panel software:

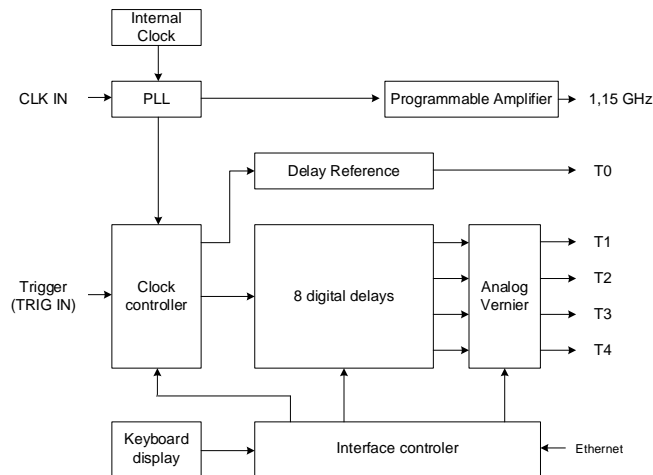
The control panel software for Windows provides a simple method to configure settings for each channel such as delay, output amplitude, output width, trigger source, trigger mode, and to control operation and status of the instrument.

The configuration information of the instrument can be saved in the GFT1608 and recall. Up to 6 configurations can be saved.



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Block diagram
Specifications

Trigger source

External

Max Repetition rate	< 50KHz
Trigger level	1V / 50Ω
Trigger Slope	Positive
Minimum Trigger delay	< 50 ns (insertion delay)

Internal

Two synchronized timers	1 Hz to 50 kHz
Software trigger	

External clock reference

Frequency	38.5MHz
Amplitude	1V/50Ω
Shape	Rectangular
Rise / Fall time	< 5ns / < 5ns
connector	BNC

Output 1.15 GHz

Amplitude	> 35dBm
Internal Attenuator	0dB to 31dB in step of 1 dB
Shape	Sinusoidal
Spectral purity	> 30dB
Phase shifter	Phase control in step of 25ps
Connector	SMA

Delay generator

Delay

Channel	8
Range	0 to 10 seconds
Resolution	1 ps
Accuracy	< 250 ps + delay x 10 ⁻⁷
RMS jitter	< 10 ps + delay x 10 ⁻⁷ (channel to channel in internal trigger) < 1 ns + delay x 10 ⁻⁷ (External trigger to any channel)

Output pulse T

Amplitude	2.5V to 10V in step of 10mV
Load	50Ω
Rise/Fall time	3ns / 3ns
Width	100ns to 10ms in step of 5ns

General

Software	Free Drivers for Seven and Control panel software
User Interface	Remote control Ethernet
Connectors	All are BNC type
Power consumption	90 To 240V / 50 – 60Hz/ 50 W
Weight / Size	< 5kg / 19" W X 363 mm D X 2U H

Options

Option 1

Programmable input frequency

Option 2

Programmable output frequency