

GFT632

32 V Pulse Generator Module

Features

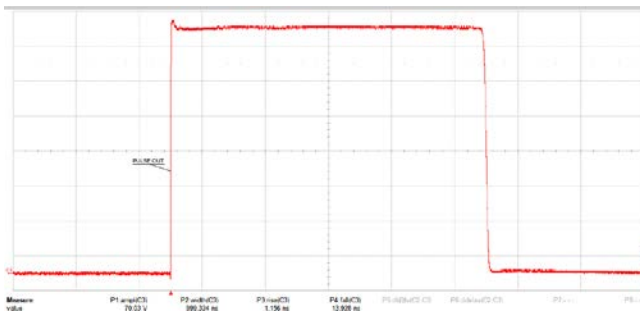
- Output pulse 32 V amplitude into 50 Ω
 < 3 ns rise time
 $1 \mu\text{s}$ width
 < 2 ps RMS jitter
- External trigger input
- Operate from standard +12 V AC to DC adapter furnished
- Compact module
- Output pulse options:
 Amplitude 15 to 70 V
 Width 50 ns to $1 \mu\text{s}$



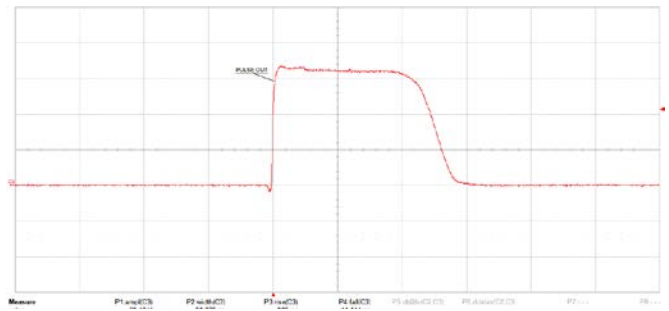
Applications

- Test and Measurement
- ATE Application
- Pulse Amplifier
- Precision Pulse Application

GFT632 module



(10 V/div, 200 ns/div)
Amplitude = 70V width = 1 μ s
 $T_r = 1.2$ ns, $T_f = 14$ ns



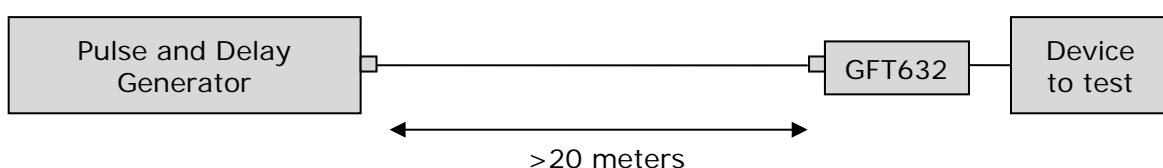
10 V/div, 20 ns/div
Amplitude = 32 V, width = 50 ns
 $T_r = 1$ ns, $T_f = 11$ ns

Description

The external triggered module is a pulse generator up to 70 V amplitude. This compact module produces square pulses up to 70 V into 50 Ω with fast 2 ns rise time.

The output amplitude is factory adjusted from 15 V to 70 V. The output width is also factory adjusted from 50 ns to $1 \mu\text{s}$.

Typical applications include amplifying the output of Greenfield Technology Pulse and Delay Generator (GFT1004 with 10 channels or GFT1020 with 20 channels). In this application the module can be up to 20 meters from the Pulse and Delay Generator and nearer the device to be triggered.



Typical application



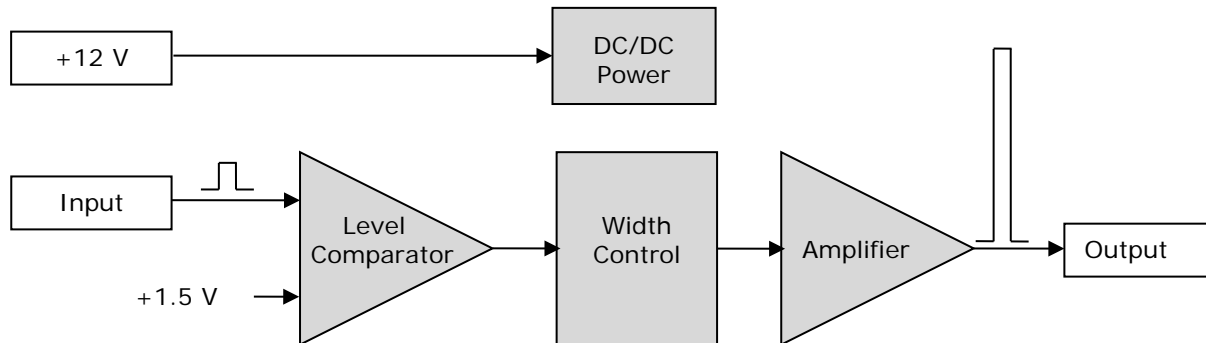
GFT632

32 V Pulse Generator Module

Specifications

Input	
Amplitude	Positive >2 V (max input safe is ± 50 V, 1 μ s)
Internal terminaison	50 Ω
Rise Time	<5 ns
Threshold	+1.5 V
Width	>10 ns
Repetitive rate	10 kHz (max.)
Connector	BNC
Output	
Pulse shape	Rectangular
Amplitude	32 V +/-0.5 V (can be adjusted: see option 1)
External load	50 Ω
Rise time	<2 ns
Fall time	<15 ns
Width (FWHM)	1 μ s +/-5 % (can be adjusted: see option 2)
Insertion delay	<5 ns (input to output)
Jitter	<2 ps RMS (from input to output)
Connector	BNC
General	
Size	106.0 x 38.5 x 31.6 mm
Power V/A	+12 V / 200 mA max.
Power connector	Locking Power Jack
Power adapter	External AC (90 to 240 V) to DC adapter furnished
LED Indicators	Green (Power), Yellow (Input Rate)
Output options	
<u>Option 1</u> : Output amplitude: 15 to 70 V (ask to factory)	
<u>Option 2</u> : Output width: 50 ns to 1 μ s (ask to factory)	

Functional overview

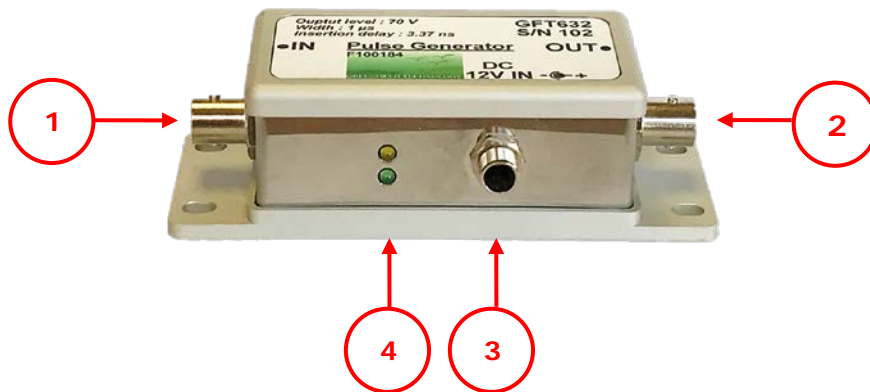


Block diagram

The “Level Comparator” allows to detect the rising edge of the input pulse to start the generator. The “width control” calibrates the width of the output pulse. In option the width can be adjusted from 50 ns to 1 μ s.

The high speed “Amplifier” calibrates the amplitude of the output pulse. This amplifier is specially designed to drive an external 50 Ω load. In option the output can provide pulse amplitude from 15 V to 70 V.

Input / Output



Connectors

REF	Description
1	Input signal: BNC connector
2	Output signal: BNC connector
3	Power +12 V input: Power jack
4	Indicators: Green (lights when power on), and Yellow (blinks at Input rate)

Ordering information

GFT632 module part number:

GFT632-Axx-Wyy (where “xx” is option 1 with Pulse Amplitude = xx Volts, and “yy” is option 2 with Pulse Width = yy ns)

Ordering example:

GFT632-A70-W100 (GFT632 with output pulse amplitude = 70 V and width = 100 ns)