

**Greenfield Technology** (GFTY) is a French engineering company dedicated to the design and development of high precision electronic and optical instrumentation.

Since 2001, GFTY provides standard products such as data acquisition system, pulse and delay generator, picosecond timing system, time interval meter, signal generator and various modules for scientific, defense and industrial applications.

GFTY offers a local office to provide service and technical help, allowing our customers a very fast response and a location for quick servicing and calibration needs.

Our products are presented in the following charts. For more details about products click on the Model reference (in green) or see our Web site: [www.greenfieldtechnology.com](http://www.greenfieldtechnology.com)

### PULSE & DELAY GENERATOR

Model	Channel Number	Delay Resolution	Output Amplitude (50 Ω load)	Form Factor
<b>GFT1064</b>	4	100 ps	5 / 10 / 50 V / LVDS	19", 1U
<b>GFT1604</b>	4, 8	100 ps/1 ps	5 / 10 / 50 V / LVDS	Mini Box
<b>GFT1804</b>	2, 4, 8	100 ps/1 ps	5 / 10 / 50 V / LVDS	Board level
<b>MOD745T</b>	4, 8	0.25 ps	5 V	Box
<b>745-OEM</b>	4, 8	0.25 ps	5 V	Board level
<b>GFT9404</b>	8	1 ps	5 V	PXI, 1 Slot
<b>GFT1504</b>	4, 8, 10	100 ps/1 ps	6 / 10 / 20 / 32 V	Box
<b>GFT1004</b>	4, 8, 10	1 ps	6 / 10 / 20 / 32 V	19", 1U
<b>GFT1020</b>	20	100 ps /1 ps	6 / 10 / 20 / 32 V	19", 2U
<b>GFT1000</b>	100	100 ps/1 ps	6 / 10 / 20 / 32 V	19", 12U



GFT1020



MOD745T



GFT1604

### HIGH SPEED DIGITIZER

Model	Channel Number	Vertical Resolution	BW / max. Sample Rate	Form Factor
<b>FTD10000</b>	1	13-bit	7 GHz / 1800 GS/s	19", 4U
<b>GFT6304</b>	4	12-bit	0.75 GHz / 3.2 GS/s	FMC
<b>GFT6204</b>	4	12-bit	0.75 GHz / 3.2 GS/s	cPCI
<b>GFT6042</b>	2, 4	14-bit	1.2 GHz / 2 GS/s	19", 1U
<b>GFT6084</b>	4	8-bit	500 MHz / 4 GS/s	19", 2U



GFT6304



GFT6084

### STREAK CAMERA

Model	Spectral Response	Analysis Duration	CCD Readout Resolution	Form Factor
<b>CBF500</b>	300 – 900 nm	5, 10, 20 and 50 ns	1024 x 1024 pixels, 12-bit A/D	Box
<b>CBF500-02</b>	300 – 900 nm	5, 10, 20 and 50 ns	1392 x 1040 pixels, 16-bit A/D, cooling	Box



CBF500

### SIGNAL GENERATOR

#### LIGHT PULSE GENERATOR

Model	Pulse Width	Peak Power	Wavelength	Form factor
<b>GFT7016</b>	0.1 to 10 $\mu$ s	0.5 to 1.5 mW	1310 or 1550 nm	19", 1U

#### RF GENERATOR

Model	Frequency Range	Frequency Resolution	Output Level	Form Factor
<b>GFT7513</b>	100 kHz to 13 GHz	0.0001 Hz	+15 dBm	Compact box



GFT7513

#### OPTICAL AWG GENERATOR

Model	Channel Number	Output Amplitude	Timing Resolution	Form Factor
<b>GFT7031</b>	1	11-bit / 10 mW	2.5 GS/s	19", 1U



GFT7021

#### FAST PULSE GENERATOR

Model	Pulse Rise time	Pulse Amplitude	Pulse duration	Form Factor
<b>GFT7021</b>	30 ps	>2 V / 50 $\Omega$	40 to 250 ps	box

#### DIGITAL PATTERN GENERATOR

Model	Channel Number	Output Amplitude	Timing Resolution	Form Factor
<b>GFT7048</b>	48	LVDS	0.96 GS/s	19", 2U



GFT7048

### TIME INTERVAL METER AND REFERENCE

#### TIME INTERVAL METER

Model	Channel Number	Time Resolution	Time range	Form Factor
<b>GFT2002</b>	2	1 ps	1 s	19", 1U
<b>GFT2005</b>	5	12 ps	100 s	19", 1U



GFT2005

#### TIME REFERENCE: SYNCHRONIZED CLOCKS DRIVERS

Model	Channel Number	Frequency Range	Phase Step	Form Factor
<b>GFT2044</b>	4	1 to 4 GHz	10 fs	19", 1U



GFT2044

## PULSE SHAPING MODULES

### ELECTRICAL / OPTICAL CONVERTER

Model	Input pulse	Wavelength	Output	Power
<b>GFT101</b>	2.5 to 10 V	1310 or 1550 nm	>0.3 mW	none

### OPTICAL / ELECTRICAL CONVERTER

Model	Input Pulse	Wavelength	Output	Power
<b>GFT200</b>	>50 $\mu$ W	1310 to 1550 nm	10 V/50 $\Omega$	$\pm$ 12 V

### 50 $\Omega$ LINE DRIVER

Model	Function	Input Pulse	Output Rise / Level	Power
<b>GFT614</b>	1 input to 4 channel drivers	+2 V or -2 V or $\pm$ 0.2 V	1 ns / TTL into 50 $\Omega$	+ 5 V
<b>GFT644</b>	4 channel drivers	+2 V or -2 V or $\pm$ 0.2 V	1 ns / TTL into 50 $\Omega$	+ 5 V

### PULSE GENERATOR

Model	Function	Output Width	Output level	Power
<b>GFT632</b>	32 V pulse	1 $\mu$ s	15-70 V / 50 $\Omega$	+12 V
<b>GFT144</b>	4 prog. delays	Up to 1 s	LVPECL	+ 5 V

### SUB-NS PULSE STRETCHER

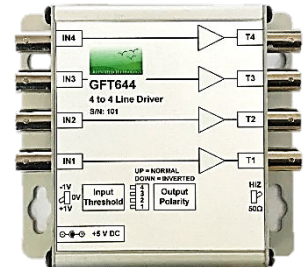
Model	Input Pulse	Frequency	Outputs	Power
<b>GFT300</b>	0.1 to 1 V / >500 ps width	40 to 100 MHz	>100 mV, sinus	+12 V



GFT200



GFT632



GFT644

## PICOSECOND TIMING SYSTEM

### TIMING SYSTEM

Model	Channel Number	Delay Resolution	Remote Control	Form Factor
<b>GFT1000</b>	100 to 2500	1 ps / 100 ps	Ethernet	19", 1U rack



GFT1000

### MASTER OSCILLATOR TRANSMITTER

Model	RMS Jitter	Output Power	Remote Control	Form Factor
<b>GFT3001</b>	15 ps	5 mW	Ethernet	19", 1U



GFT3001

### OPTICAL SPLITTER

Model	Channel Number	RMS Jitter	Insertion loss	Form Factor
<b>GFT4016</b>	4, 8, 16	<1 ps	<14 dB	19", 1U



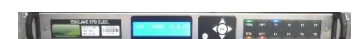
GFT4016

### SLAVE DELAY GENERATOR

Model	Channel Number	Slave/Slave RMS jitter	Output Amplitude	Form Factor
<b>GFT1012</b>	2, 4	5 ps	10 V/ 50 $\Omega$	19", 2U
<b>GFT1404</b>	4, 8	50 ps	5 V/ 50 $\Omega$	PXI, 1 slot
<b>GFT1018</b>	8	100 ps	10 V/ 50 $\Omega$	19", 1U
<b>GFT1004</b>	8, 10	15 ps	10/32 V / 50 $\Omega$	19", 1U



GFT1012



GFT1018

## OUR REFERENCES

 <p><b>GREENFIELD SYSTEMS</b></p>	 <p><b>BNC</b> Precision Instrumentation Since 1982</p>	 <p><b>ACQUITEK</b></p>	
 <p>DE LA RECHERCHE À L'INDUSTRIE <b>cea</b></p>	 <p><b>cnrs</b> dépasser les frontières depuis 1963</p>	 <p><b>DGA</b></p>	
 <p><b>Petal</b> PETAWATT AQUITAINE LASER</p>	 <p><b>Laser Mega Joule</b></p>	 <p><b>SOLEIL</b> SYNCHROTRON</p>	
 <p><b>l'X</b> ÉCOLE POLYTECHNIQUE UNIVERSITÉ PARIS-SACLAY</p>	 <p><b>eli</b></p>	 <p><b>beamlines</b></p>	 <p><b>Apollon</b></p>