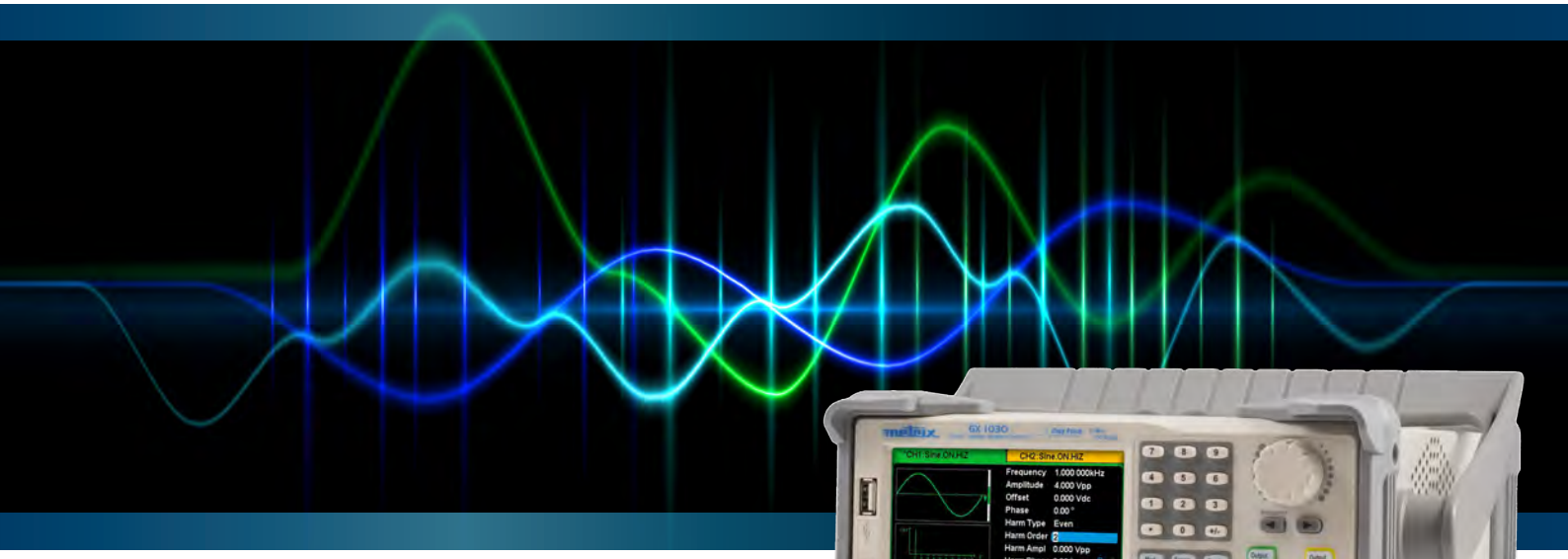
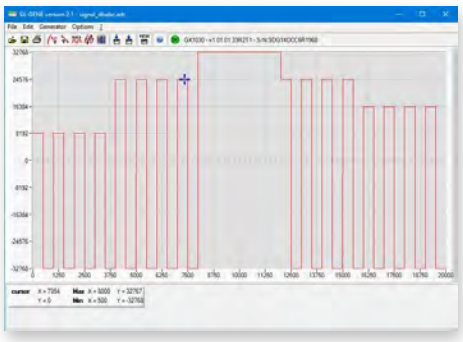
GX 1030

ARBITRARY FUNCTION GENERATOR
2 CHANNELS, 30 MHz



This multifunction, high-performance, communicating laboratory tester-generator offers a variety of stable, high-fidelity signals:

- Large 4.3-inch high-contrast TFT colour screen (960x540 mm)
- Frequency range from 0.001 mHz to 30 MHz for classic and arbitrary signals
- DDS technology on 2 outputs (coupling and duplication) – combination of functions
- Signals sampled at 150 MS/s with 14-bit resolution
- Analogue and digital modulation types: AM & FM, FSK & ASK, PSK and PWM
- Practical SWEEP and BURST functions
- Frequency meter from 100 mHz to 200 MHz
- EasyPulse technology for generating low-jitter pulses
- TrueArb technology to eliminate jitter and signal distortion
- Programmable via a USB or Ethernet link and storage on USB key
- PC software for creating arbitrary signals: SX-GENE and EasywaveX



SX GENE software:
construction of arbitrary signals on PC

Measure up

GX 1030

Display	4.3-inch colour TFT screen with high contrast – dimensions 960x 540 mm -24 bits
Controls on front panel	23 direct-access buttons, 1 rotary knob
Adjustment of signal parameters	Continuous via the encoder and/digital keypad
BNC output terminals on front panel	Generator outputs 1 & 2 – Independent settings (waveform, f, phase, amplitude, etc.), coupled, duplicated or combined channels
BNC I/O terminals on rear panel	3 inputs/outputs for Ext. trigger, frequency meter and 10 MHz clock - synchronization

Signal generation

Signal types	Sine, Square, Triangle, Ramp, Pulse, White Noise, Arbitrary Signal (196 pre-installed waveforms)
Generation of arbitrary signals	
Resolution / Sampling	14 bits / 150 MS/s
Data storage	Memory depth 16 kpts - Storage of predefined or specific signals on USB drive
Editing of signals with Sx-Gene	Acquisition, transfer & modification of a signal acquired from an oscilloscope (OX5000OX6000, OX7000,OX9000 Scopein@Box) Graphical or mathematical editing using the Sx-Gene software. Modification of a signal acquired and/or combination of standard signals from the generator
Signal frequencies	
Frequency range	Sine from 0.001 mHz to 30.000 MHz, Triangle 500 kHz, Noise and Square 30 MHz, Pulse 12.5 MHz, Arbitrary Signal 6 MHz
Resolution / Accuracy	7-digit display - 1 mHz resolution - vertical accuracy <=(1%+1mVpp) at 10 kHz
Long-term drift	± 100 ppm / an
Temperature coefficient	< 5 ppm / °C
Amplitude	
Voltage levels	50 Ω output = 2 mVss ~ 10 Vss < 10 MHz / 2 mVss ~ 5 Vss ≥10 MHz | HiZ output = 4 mVss ~ 20 Vss < 10 MHz / 4 mVss ~ 10 Vss ≥ 10 MHz
Flatness	7-digit display - 1 mHz resolution - vertical accuracy <=(1%+1mVpp) at 10 kHz
VDC offset	± 100 ppm / year
Impedance / Protection	< 5 ppm / °C
Signal characteristics	
Sine	Typical distortion < 0.075 % for f < 20 kHz, and harmonics < -50 dBc
Triangle (max. frequency 2 MHz)	Linearity error < 1% max
Square & pulse	Rise time < 16.8 ns (typ.) – Duty cycle 10-90% (DC < f < 20MHz) –Min. pulsed 32.6 ns with 1 ns resolution

AM Modulation		FM Modulation	
Carrier	Sine, Square, Triangle, Arbitrary	Carrier	Sine, Square, Triangle, Arbitrary
Modulated signals	Sine, Square, Ramp, Noise, Arbitrary (1 mHz-20 kHz)	Modulated signals	Sine, Square, Ramp, Triangle, Noise, Arbitrary (1 mHz-20 kHz)
Depth	0% to 120%	Frequency shift	0 to 15 MHz

FSK Modulation		ASK Modulation	
Carrier	Sine, Square, Triangle, Arbitrary	Carrier	Sine, Square, Triangle, Arbitrary
Modulated signals	50% duty cycle (1 mHz to 50 kHz)	Modulated signals	50% duty cycle (1 mHz to 50 kHz)

PM Modulation		PWM Modulation	
Carrier	Sine, Square, Triangle, Arbitrary	Frequency	1 mHz to 1 MHz
Modulated signals	Sine, Square, Ramp, Triangle, Noise, Arbitrary (2 mHz-20 kHz)	Modulated signals	Sine, Square, Triangle, Noise, Arbitrary
Phase shift	0 to 360°	Resolution	6.67ns

Other functions

Sweep		Burst	
Carrier	Sine, Square, Ramp, Triangle, Arbitrary	Signals	Sine, Square, Ramp, Arbitrary
Type	Linear/logarithmic	Type	Short (1-100,000 cycles), Infinite, Gate
Direction	Rising or falling	Phase start/stop	0° to +360°
Sweep time	1 ms to 500 s	Internal period	1 µs to 1000 s ± 1%
Trigger	Manual, External, Internal	-	-

Frequency meter	
Measurement range	100 mHz to 200 MHz
Parameters	Frequency, depth, period, duty cycle, pulse
Harmonics function	
Graphical display	16 even or odd orders generated with amplitude and phase
Combination of channels	
Display of setup	2 internal channels CH1-CH2- CH1+CH2

General specifications

Data storage	Storage of predefined or specific signals and complete instrument configurations on USB drive
Communication interface	USB Device, USB host -, LAN
Main power supply	100~240 VRMS 45~440 Hz CAT II - < 50W
Software	The SX-GENE software is available for download from our support website with the LV and LW drivers
Mechanical specifications	L x H x W = 260.3mm x 107 mm x 295 mm - 3.43 kg
Guarantee	2 years

Reference to order

GX 1030
30 MHz arbitrary function generator

State at delivery

1 generator with 2P+E mains power cable, one USB cable and Quick Start Guide on paper in 5 languages, User's Manual and software available for download

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