Technical Specifications

	GX 1025	GX 1050
Man-machine interface		
Display	Large high-contrast 3.5 '' TFT colour screen - resolution 320 x 240	
Controls on front panel	18 direct-access buttons, 1 rotary button	
Adjustment of signal parameters	Continuous adjustment by the encoder and/or numeric keypad	
BNC output terminals on front panel	Generator outputs 1 & 2 - Separate adjustment (waveform, f, phase, amplitude, etc.), coupled or duplicated	
BNC I/O terminals on rear panel	TTL-compatible trigger and synchronization outputs	
Continuous signal generation		
Signal types	Sine, Square, Triangle, Ramp, Pulse, White Noise, Arbitrary Signal (48 pre-installed waveforms)	
Arbitrary signal generation		
Resolution / Sampling rate	14 bits / 125 MS/s	
Memory	16k memory depth (512k on CH1 only) - Storage of predefined or specific signals on USB key	
Editing of signals with SX-GENE	Acquisition, transfer & modification of a signal acquired from an oscilloscope (OX6000, OX7000, Scopein@Box) Graphical or mathematical editing with the SX-GENE software Modification of a signal acquired and/or combination of standard signals from the generator	
Signal frequency		
Frequency range	Sine from 0.001 mHz to 25.000 MHz, Triangle 300 kHz, Noise and Square 25 MHz, Pulse 10 MHz, Arbitrary Signals 5 MHz	Sine from 0.001 mHz to 50.000 MHz, Triangle 300 kHz, Noise and Square 50 MHz, Pulse 20 MHz Arbitrary Signals 5 MHz
Resolution / accuracy	7-digit display – resolution from 1 mHz to 1 kHz depending on frequency range ± 20 ppm for F > 10 kHz , ± 30 ppm for F < 10 kHz	
Long-term drift	± 100 ppm / year	
Temperature coefficient	< 5 ppm / °C	
Amplitude		
Voltage levels	Output 1 = 2 mVpp ~ 10 Vpp 50 Ω 2 mVpp ~ 20 Vpp open circuit Output 2 = 2 mVpp ~ 3 Vpp 50 Ω 2 mVpp ~ 6 Vpp open circuit	
Flatness	< 0.1 dB for f < 100 kHz	
Vdc offset	Output 1 = ± 5 VDC at 50 Ω, Output 2 = 1,5 VDC at 50 Ω – accuracy < 5% ±1 mV	
Impedance / Protection	50 Ω / Protection contre les court-circuits	
Signal characteristics		
Sine	Distortion < 0.2 % typical for f < 20 kHz, and harmonics < -50 dBc for DC < f < 25 MHz (level < 1 Vpp)	
Triangle (max frequency 2 MHz)	Linearity error < 1% max	
Square & pulse	Rise time < 12 ns (typ.) – Duty cycle 20-80% (DC < f < 20 MHz) – Pulse 20 ns to 2,000 s	

Modulation (internal or external source)

AM modulation		FM modulation	
Carrier	Sine, Square, Triangle, Arbitrary (except DC)	Carrier	Sine, Square, Triangle, Arbitrary (except DC)
Modulated signals	Sine, Square, Ramp, Noise, Arbitrary (2 mHz-20 kHz)	Modulated signals	Sine, Square, Ramp, Triangle, Noise, Arbitrary (2 mHz-20 kHz)
Depth	0% to 120%	Frequency offset	0 to 12.5 MHz (GX1025) / 25 MHz (GX1050)

FSK modulation		ASK modulation	
Carrier	Sine, Square, Triangle, Arbitrary (except DC)	Carrier	Sine, Square, Triangle, Arbitrary (except DC)
Modulated signals	50% of duty cycle (2 mHz to 50 kHz)	Modulated signals	50% of duty cycle (2 mHz to 50 kHz)

PM modulation	
Carrier	Sine, Square, Triangle, Arbitrary (except DC)
Modulated signals	Sine, Square, Ramp, Triangle, Noise, Arbitrary (2 mHz-20 kHz)
Phase offset	0 to 360°

Other functions

Sweep		Burst	
Carrier	Sine, Square, Ramp, Triangle, Arbitrary (except DC)	Signals	Sine, Square, Ramp, Arbitrary (except DC)
Type	Linear/Logarithmic	Type	Short (1-50,000 cycles), Infinite, Gate
Direction	Increasing or Decreasing	Phase start/stop	-180° to +180°
Sweep time	1 ms to 500 s	Internal period	1 µs to 500 s +/- 1%
Trigger	Manual, External, Internal	-	-

External frequency meter	
Measurement range / resolution	100 mHz to 200 MHz
Sensitivity / Input impedance	20 mVrms for 100 mHz < f < 100 MHz, 40 mVrms beyond / 1 MΩ