

Arbitrary Waveform Generator

GW INSTEK

SFG-830 Series



- 30MHz, 12 Bit Output, 12k Memory.
- Includes Waveform Editing Software.
- Optional GPIB Interface.
- Int/Ext AM/FM/PM.

		SFG-830 & SFG-830G
Output Function		SINE, TRIANGLE, RAMP, SQUARE, SYNC OUTPUT, ARBITRARY WAVE
Frequency Range	Sine Square Triangle Ramp	20mHz ~ 30MHz 20mHz ~ 30MHz 100mHz ~ 100kHz 100mHz ~ 100kHz
Frequency Resolution	Sine Square Triangle Ramp	20mHz 20mHz 10mHz 10mHz
Frequency Accuracy		± 10ppm
Frequency Aging		± 5ppm/Year
Output Impedance	Source Impedance	50Ω ± 10%
Amplitude	Range Resolution Accuracy	10mV ~ 10Vpp (into 50Ω) 8 Amplitude Ranges, Vac Peak+Vdc ≤ 5V 3 Digits ± 0.5dB (± 5mVrms) (Sine Out) ± 12% (± 5mVrms) (Square Out) ± 5% (± 5mVrms) (Triangle Out) ± 5% (± 5mVrms) Arbitrary Out
DC Offset	Range Resolution & Accuracy	± 5V (into 50Ω), Vac Peak+Vdc, ≤ 5V 3 Digits; ± 1.5% of Setting + 1mV
Sync Output	Sync Output & Fan-Out	TTL Levels > 10 TTL Loads
Sine Output	Harmonics	DC ~ 100kHz : -50dBc, 0.1MHz ~ 1MHz : -40dBc 1MHz ~ 10MHz : -30dBc, 10MHz ~ 30MHz : -25dBc
Square Output	Rise/Fall Time Overshoot Asymmetry	≤ 15nS ≤ 5% (At Full Scale Output) ± 1% of Period + 4nS
Triangle & Ramp	Linearity	± 0.1% of Full Scale Output
Arbitrary Waveforms	Sample Rate Waveform Length Vertical Resolution	42.949600MHz / N, where N = 8, 10, 12 up to 2 ¹⁵ 12000 Points Max 12 Bits
Sweep	Sweep Functions Sweep Range & Time	LIN or LOG 20mHz ~ 30MHz; 0.01S ~ 1000S
AM	Functions Modulation Rate & Span Ext Input & Impedance	External, Internal (Sine, Triangle, Ramp, Square) 10mHz ~ 10kHz (Internal); 50kHz Max (External); 0 ~ 100% ± 5V for 100% Modulation; 100kΩ
FM	Functions Modulation Rate & Span	Sine, Triangle, Ramp, Square 10mHz ~ 10kHz; 30MHz (100kHz for Triangle, Ramp)
PM	Span Modulation Rate	360 Degrees 20mHz ~ 10kHz
Interface		SFG-830, RS-232; SFG-830G, GPIB & RS-232
Software		SFG-S1 Arbitrary Waveform Composer Software (for Windows)
Power Source		AC100V / 120V / 220V / 240V ± 10%, 50 / 60Hz
Accessories		Instruction Manual x 1, Power Cord x 1, GTL-110 x 1
Dimensions & Weight		214mm (W) x 89mm (H) x 370mm (D) 4.8kg

ORDERING INFORMATION

SFG-830	30MHz Arbitrary Function Generator with RS-232C Interface
SFG-830G	30MHz Arbitrary Function Generator with GPIB Interface