

30MHz Arbitrary/Function Generator



FEATURES :

- * 30MHz Direct Digitally Synthesized Source
- * 20mHz Frequency Resolution
- * ± 10 ppm Frequency Accuracy
- * 12 Bit, 5M Sample/S Arbitrary Waveforms
- * Internally Synthesized FM, AM and Phase Modulation (PSK)
- * Linear and log Sweeps
- * Arbitrary Modulation
- * Standard Interface : RS-232C
- * Optional IEEE-488 Interface only for SFG-830G

SFG-830



SPECIFICATIONS		
OUTPUT FUNCTION	SINE, TRIANGLE, RAMP, SQUARE, SYNC OUTPUT, ARBITRARY WAVE	
FREQUENCY RANGE	Sine Square Triangle Ramp	20mHz ~ 30MHz 20mHz ~ 30MHz 10mHz ~ 100kHz 10mHz ~ 100kHz
FREQUENCY RESOLUTION		20mHz (10mHz for TRIANGLE and RAMP function)
FREQUENCY ACCURACY		± 10 ppm
FREQUENCY AGING		± 5 ppm/year
OUTPUT IMPEDANCE	Source Impedance	50W $\pm 10\%$
AMPLITUDE	Range Resolution Accuracy	10mV ~ 10Vpp (into 50W) 8 amplitude range, Vac peak + Vdc ≤ 5 V 3 digits ± 0.5 dB (sine out) ; $\pm 12\%$ (square out) $\pm 5\%$ (triangle out) ; $\pm 5\%$ (arbitrary out)
DC OFFSET	Range Resolution Accuracy	± 5 V (into 50W), Vac peak + Vdc ≤ 5 V 3 digits $\pm 1.5\%$ of setting + 1mV
SYNC OUTPUT	Sync Output Sync Fan-Out	TTL levels > 10 TTL load
SINE OUTPUT	Harmonics	DC ~ 100kHz : -50dBc, 0.1M ~ 1MHz : -40dBc 1M ~ 10MHz : -30dBc, 10M ~ 30MHz : -25dBc
SQUARE OUTPUT	Rise/Fall Time Overshoot Asymmetry	≤ 15 nS $\leq 5\%$ (at full scale output) $\pm 1\%$ of period + 4nS
TRIANGLE AND RAMP	Linearity	$\pm 0.1\%$ of full scale output
ARBITRARY WAVEFORMS	Sample Rate Waveform Length Vertical Resolution	42.949600MHz / N, N = 8, 10, 12..... ² ¹⁵ 12000 points max 12 bits
SWEEP	Sweep Functions Sweep Range Sweep Time	LIN or LOG 20mHz ~ 30MHz 0.01S ~ 1000S
MODULATION	AM Modulation Function Modulation Rate Modulation Span Ext Input Ext Input Impedance FM Modulation Function Modulation Rate Modulation Span PM Modulation Span Modulation Rate	External, internal (sine, triangle, ramp, square) 10mHz ~ 10kHz (internal) 50kHz max (external) 0 ~ 100% ± 5 V for 100% modulation 100kW Sine, triangle, ramp, square 10mHz ~ 10kHz 30MHz (100kHz for triangle, ramp) 360 Degrees 20mHz ~ 10kHz
INTERFACE	Standard : RS-232C Option : GPIB Interface GPB-01 Arbitrary waveform composer software (window 95) SFG-S1	
POWER SOURCE	AC100V/120V/220V/240V $\pm 10\%$, 50/60Hz	
ACCESSORIES	Power cord x 1, Instruction Manual x 1, GTL-110 x 1	
DIMENSIONS & WEIGHT	214(W) x 89(H) x 370(D) mm, Approx. 4.8kg	

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ISO-9001 & ISO-14001