

Test & Measurements Counters & Generators

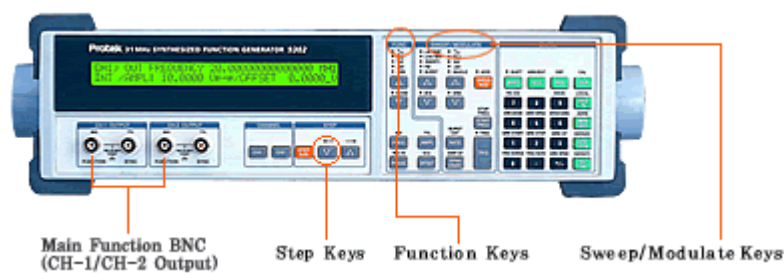
9301 -9302

Synthesized Function Generator



Features

- 31 MHz Sine and Square Waves
- Two Function in one instrument.
- Function Generator Arbitrary Waveform Generator
- Offers two independent Channels
- Window-based waveform Editing Software included for convenient creation and editing of arbitrary waveforms(option)



Specifications

- **Waveform Specifications**
Standard : Sine,Square,Triangle,Ramp,Noise,ARB
- **Arbitrary Waveforms**
Sample Rate : 40Msa/s
Standard : Sine,Square,Triangle,Ramp,DC,Exponential,Exponential
Fall,Noise,Freehand,Line,Damped sine
Wave form Length : 16 to 16,384 Points

- **Output Characteristics Specifications**

Output : 2Channels

Source Impedance : 50 ohms Floating

Inter channel Cross talk : <0.05%

- **Frequency Characteristics Specifications(Square Wave)**

Sine,Square : 0.01 uHz to 31 MHz

Triangle, Ramp : 0.01 uHz to 2 MHz

Noise : 10MHz(64BITS)

- **Signal Characteristics Specifications(Square wave)**

Rise/Fall Time : < 15ns(10 to 90%)

Asymmetry : < 1% of Period + 4ns

Overshoot : < 5%

- **Sine wave Spectral Purity Specifications**

Spurious Components : < -50dBc(non-harmonic)

Phase Noise : <-50 dBc in a 30kHz band centered on the carrier

Subharmonic : <-60 dBc

Harmonic distortion : <-45 dBc DC to 1MHz <-32 dBc 1 MHz to 31 MHz

- **DC Off set**

Range : $\pm 5V$ (limited such that $V_{ac\ peak} + V_{dc} \leq 5V$)

Accuracy : $\pm 1.5\%$ of setting + 0.5mV(DC Only) $\pm 80mV$ depending on AC and DC setting

- **Amplitude Modulation**

Source : Internal(Sine,square,Trigle,ramp or arbitrary) or External

Depth : 0 to 100% AM or $\pm 100\%$ DSBSC

Rate : 0.001 Hz to 10 KHz internal,20 KHz max external

Distortion : <-35 dB at 1KHz, 80% depth

DSB Carrier : <-35 typical at 1KHz modulation rate(DSBSC)

- **Standard Timebase**

Accuracy : $\pm 3ppm$ (20i£to 30i£)

Aging : $\pm 3ppm/year$

Input : 10MHz/n $\pm 2ppm$ N=1 to 8,1Vp-p minimum input level

Output : 10MHz,>1Vp-p sine into 50 ohms

- **Frequency Modulation**

Source ; internal(sine,square,triangle,ramp or arbitrary)

Rate : 0.001Hz to 10 KHz

Span : 0.01 ¥iHz to31KHz

- **Phase Modulation**

Source : internal(sine,square,triangle,ramp or arbitrary)

Rate : 0.001Hz to 10 KHz

Span : $\pm 9999.99i£$

- **Burst Modulation**

Waveform : internal(sine,square,triangle,ramp or arbitrary)

Frequency : 0.001Hz to 10 KHz

Count : 0.01 μ Hz to 31KHz

Phase Shift : \pm 100KHz

- **Frequency Sweep**

Type : Linear or Log, phase continuous

Time : 0.001Hz to 10KHz

Span : 0.01 μ Hz to 31KHz(2MHz for triangle,ramp)

Market Output : Two markets may be set at any sweep point(TTL output)

Sweep Output : 0-10V linear ramp signal,synchronized to sweep

- **Trigger Generator**

Source : CH1: Single, INT RATE,POSE ext1,NEG EXT1, line
CH2: INT CH1, INT RATE,POS EXT2,NEG EXT2

Rate : 0.1ms to 999.99s

External : Positive or Negative edge,TTL input

Output : TTL Output

- **General**

Operating Temperature : 5 °C to 40 °C

Operating Humidity : 50% to 80%

Weight : 8.7Kg

Dimensions : 363mm(W) 109mm(H) 386mm(D)

Power Supply : 100/120/220/230 Vac(\pm 10%) 50/60Hz

Power Consumption : 9301 (46W) / 9302 (80W)