Sweep Function Generators 2 and 10 MHz

B803 2MHz Sweep Function Generator

- Seven frequency ranges with 100:1 control on each range
- Built-in 2MHz, 4 digit frequency counter
- Less than 2% sine-wave distortion
- Variable symmetry
- DC offset and Voltage Controlled Frequency input
- TTL sync output

B810 10MHz Sweep Function Generator

- Wide (0.01HZ to 10MHz) Frequency Range
- Burst and Triggered mode
- Sweep start/stop capability
- Six digit LED frequency readout
- Log. or Lin. sweep
- Built-in 10MHz frequency counter
- External FM with the VCG input
- Output can be amplitude modulated







B803

B810

SPECIFICATIONS

[B803]

Output Characteristics

Waveforms: Sine, Square, Triangle, Pulse, Ramp Frequency Range: 0.02Hz to 2MHz in 7 ranges Tuning Range: 100:1 on each range Frequency Accuracy: ±(0.01% + 1d) Frequency Stability: 0.1% after 20 minutes Amplitude: 2V to 20V P-P open circuit DC Offset: Variable from < -10V to >+10V open circuit

Output Impedance: 50Ω ±5%
Variable Symmetry: 1:1 to 4:1
Output Attenuation: 0 to 40dB

(20dB ±1dB step and 0 to 20dB variable) VCF Input: 100:1 tuning range with an input voltage level from 0 to -10V

Sine Wave

Distortion: < 2% from 10Hz to 100KHz Amplitude Flatness: ≤ 0.3dB

Square Wave

Rise/Fall Time: < 100ns at max amplitude

Triangle Wave

Linearity: > 98% to 100KHz

Sweep Characteristics Sweep Mode: Linear

Sweep Time: Variable from 20ms to 2s Sweep Width: Variable from 10:1 to 1000:1

Frequency Counter

Modes: Internal and External; Display: 4 digit red LED Measuring Range: 10Hz to 2MHz
Accuracy: ±0.01% ±1 count; Sensitivity: 50mV RMS

Accuracy: $\pm 0.01\% \pm 1$ count; Sensitivity: 50mV RM Max Input V: 140V P-P; Input Impedance: $1M\Omega$

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V ±10%; Frequency: 48Hz to 66Hz
Power Consumption: Approx. 5VA
Operating Temperature: 0 to 50°C
Size: 3.3" H > 8.8" W > 10.1" D. Weight: 8 lbs

Size: 3.3" H × 8.8" W × 10.1" D; Weight: 8 lbs Supplied Accessories: Manual, Line cord, BNC cable

[B810]

Output Characteristics

Frequency Range: 0.01Hz to 10MHz in 9 ranges Output Level: ±10 Volts into 50Ω Waveforms: Sine, Square, Ramp, Pulse Attenuator: 20dB, 40dB, 60dB & 20dB variable Impedance: 50Ω: DC Offset: ±5V in to 50Ω

Sine Wave

Flatness: ±0.2dB: 0.01Hz to 100KHz; Distortion: 0.5%

Triangle Wave Linearity: > 99%

Square Wave

Rise/Fall Time: \leq 25ns (into 50 Ω)

Pulse

Duty Cycles: 20:80 to 80:20 may be obtained

Operating Modes: CW, Triggered, gated, burst, sweep Trigger/Gate Input Level: TTL; Burst Time: 1ms to 10s Trigger/Gate Freq. Range: 0.1Hz to 1MHz

Sweep

Types: Linear and Log

Sweep Time: 1ms to 10s; Sweep Width: Variable to 100:1 Start Freq: 0.01Hz to 10MHz

AM Modulation

Type: Internal

Modulation Level: 0 to 100%; Modulation Voltage: 0 to 5V Modulation Frequency: DC to 1MHz

FM Modulation

Type: External

Tuning Range: 1000:1 with an input voltage of 0 to –5V (VCG)

Frequency Counter

Measuring Range: 1Hz to 10MHz Gate Time: 0.01s, 0.1s, 1s, 10s

Accuracy: ±0.01%; Sensitivity: 50mV RMS

Max Input V: 250V DC and AC RMS; Input Impedance: $1M\Omega$

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V

±10%; Frequency: 48Hz to 66Hz Power Consumption: 9VA Operating Temperature: 0 to 50°C

Size: 3.8" H × 11.5" W × 12.5" D; Weight: 8 lbs Supplied Accessories: Manual, Line cord, BNC cable