

B801/B803 2MHz Sweep Function Generator

- Seven frequency ranges with 100:1 control on each range
- Built-in 2MHz, 4 digit frequency counter (B803)
- Less than 2% sinewave 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



SPECIFICATIONS ■

[B801/B803]**Output Characteristics**

Waveforms: Sine, Square, Triangle, Pulse, Ramp
Frequency Range: .02Hz to 2MHz in 7 ranges
Tuning Range: 100:1 on each range
Frequency Accuracy: B801: 5% of FS; B803: $\pm (0.01\% + 1D)$
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: $50\Omega \pm 5\%$
Variable Symmetry: 1:1 to 4:1
Output Attenuation: 0 to 40dB (20dB ± 1 dB 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: ≤ 0.3 dB

Square Wave

Rise/Fall Time: < 100 ns 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 (B803)

Modes: Internal and External; **Display:** 4 digit red LEDs
Measuring Range: 10Hz to 2MHz.
Accuracy: $\pm 0.01\% \pm 1$ count; **Sensitivity:** 50mV RMS
Max Input V: 140V P-P; **Input Impedance:** 1M Ω

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V $\pm 10\%$; Frequency: 48Hz to 66Hz
Power Consumption: Approx. 5VA
Operating Temperature: 0 to 50°C
Size: 3.3" H \times 8.8" W \times 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 50 Ω
Waveforms: Sine, Square, Ramp, Pulse
Attenuator: 20dB, 40dB, 60dB & 20dB variable
Impedance: 50 Ω ; **DC Offset:** $\pm 5V$ in to 50 Ω

Sine Wave

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

Triangle Wave

Linearity: $> 99\%$

Square Wave

Rise/Fall Time: ≤ 25 ns (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: $\pm 0.01\%$; **Sensitivity:** 50mV RMS
Max Input V: 250V DC and AC RMS; **Input Impedance:** 1M Ω

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V $\pm 10\%$; Frequency: 48Hz to 66Hz
Power Consumption: 9VA
Operating Temperature: 0 to 50°C
Size: 3.8" H \times 11.5" W \times 12.5" D; **Weight:** 8 lbs.
Supplied Accessories: Manual, Line cord, BNC cable