



Sweep Function Generator

Model: MFG-8255A

Features:

- Frequency range: 0.3Hz ~ 3MHz / 0.5Hz ~ 5MHz.
- Waveform: Sine, triangle, square, ramp, TTL and CMOS output.
- External voltage controlled frequency (VCF) function.
- Duty cycle control with signal inversion capability.
- Variable DC offset control.
- Two-step (-20dB x 2) and variable attenuator.
- Built-in 6 digit counter with INT / EXT function up to 100MHz / high resolution.
- INT / EXT, AM / FM modulation.
- Lin / Log sweep mode.
- GCV output for synchronization.



Specifications:

Main	Frequency range: 0.3Hz ~ 3MHz / 0.5Hz ~ 5MHz (7 ranges). Amplitude: 20Vpp. Impedance: 50W ±10%. Attenuator: -20dB ± 1dB x 2. DC offset: < -5V ~ > 5V (into 50W load). Duty control: 80%:20%:80% to 1MHz continued variable.
Sine wave	Distortion: ≤ 1 Flatness: < 0.3dB, 0.3Hz ~ 300KHz; < 0.5dB, 300KHz ~ 3MHz / < 0.3dB, < 500KHz; ± 1dB < 5MHz.
Triangle wave	Linear: 98%, 0.3Hz ~ 100KHz / 0.5Hz ~ 100KHz; 95%, 100KHz ~ 3MHz / 100KHz~5MHz.
Square wave	Symmetry: ±2%, 0.3Hz ~ 100KHz / 1Hz ~ 100KHz. Rise of fall time: ≤ 80ns / 50ns at maximum output (into 50W load).
CMOS output	Level: 4Vpp ±1Vpp ~ 14.5Vpp ±0.5Vpp adjustable. Rise or fall time: ≤ 120ns.
TTL output.	Level: 3Vpp. Load capacity: 20TTL load. Rise or fall time: ≤ 25ns.
VCF	Input voltage: 0V ~ 10V ±1V (100:1). Input impedance: 10KW ±10%.
GCV	Output voltage: To set the voltage between 0V ~ 2V as per different frequency.
Sweep operation	Sweep / manual: Switch selector. Sweep / rate: 100:1 ration max and adjustable. Sweep / time: 0.5s ~ 30s adjustable. Sweep / mode: Lin. / Log. Switch selector.
Amplitude modulation	Depth: 0 ~ 100%. MOD. Freq.: 400Hz (INT): DC ~ 1MHz (EXT). Carrier BW: 100Hz ~ 3MHz (-3dB). EXT sensitivity: £ 10Vpp for 10% modulation.
Frequency counter	INT. / EXT: switch selector Range: 0.3Hz ~ 3MHz / 0.5Hz ~ 5MHz (5Hz ~ 100MHz Ext). Accuracy: Time base accuracy ±1count. Time base: ±20ppm (23°C ±5°C) after 30 minutes warm up. Resolution: The maximum resolution 10nHz for 1Hz and 0.1Hz for 100MHz. Input impedance: 1MW / 150pF. Sensitivity: 100mVrms (5Hz ~ 100MHz).
General	Power source: AC115V 230V ±10%, 50 / 60Hz. Operation environment: Indoor use, altitude up to 2,000m, ambient temperature 0°C ~ 40°C, relative humidity 80% (maximum), installation category II, pollution degree 2. Accessories: Power code x 1, testing code x 1, instruction manual x 1. Dimension & Weight : 251 (H) x 91 (W) x 291 (D) mm; Approx 2.4kgs

Made in Taiwan