



MFG-1000 Series - Features and Benefits



Delivery Detail: 1 week
Payment Terms: T/T, Western Union



7W(8Ω) power amplifier

- LCD display, English/Chinese menu
- Dual independent output channels
- 32 kinds of built-in pre-stored waveforms
- 1μHz Frequency resolution
- 1mV(50Ω) Minimum stable output waveform
- FM, FSK, ASK, PSK modulation functions
- Frequency sweep, amplitude sweep and burst functions
- Over voltage, over current, output short-circuit and reverse voltage protections
- Optional parts: RS232 interface, 200MHz frequency counter,

Model	MFG-1005	MFG-1010	MFG-1015	MFG-1020
Frequency range(sine)	1μHz~5MHz	1μHz~10MHz	1μHz~15MHz	1μHz~20MHz
Waveform Characteristics				
Waveform type	32 waveforms including: Sine, Square, Triangle, Ramp, Pulse etc.			
Waveform length	1024 points			
Sample rate	100MSa/s			
Waveform amplitude resolution	8bits			
Sinusoidal harmonic rejection	≥40dBc (<1MHz), ≥35dBc (1MHz~20MHz)			
Sine wave total distortion	≤1% (20Hz~200kHz)			
Square rise/fall edge time	≤35ns			
Square overshoot	≤10%			
Square wave duty cycle	1%~99%			
Frequency Characteristics				
Frequency range	Sine: 1μHz~Max.frequency (MHz); Other waveforms: 1μHz~1MHz		Square: 1μHz~5MHz;	
Frequency resolution	1μHz			
Frequency accuracy	±(5×10 ⁻⁵)			
Frequency stability	±5×10 ⁻⁶ /3 hours			
Amplitude Characteristics				
Amplitude range	2mVpp~20Vpp 40mHz~10MHz (high impedance) 2mVpp~15Vpp 10MHz~15MHz (high impedance) 2mVpp~8Vpp 15MHz~20MHz (high impedance)			
Amplitude resolution	20mVpp (amplitude>2Vpp), 2mVpp (amplitude<2Vpp)			
Amplitude accuracy	±(1%+2mVrms) (high impedance, true RMS, frequency at 1kHz)			
Amplitude stability	±0.5%/3 hours			
Amplitude flatness	±5% (frequency<10MHz), ±10% (frequency >10MHz)			
Output impedance	50Ω			
DC Offset Characteristics				
Offset range	±10V (high impedance, attenuation 0dB)			
Resolution	20mVdc			
Offset accuracy	±(1%+20mVdc)			



Specifications

Output Characteristics of Channel A	Sweep Characteristics (linear sweep on frequency or amplitude)	
	Sweep range	free to set start point and stop point
	Sweep step	higher than any value of resolution
	Sweep rate	10ms~60s/step
	Sweep mode	Up, Down, Up-Down
	Manual sweep	step/time
	Frequency Modulation Characteristics	
	Carrier signal	channel A signal
	Modulation signal	internal signal of channel B or external signal
	FM deviation	0%~20%
	Shift Keying Characteristics	
	FSK	free to set carrier frequency and hop frequency
	ASK	free to set carrier amplitude and hop amplitude
	PSK	hop phase 0~360°, max. resolution 1°
	Alternative rate	10ms~60s
Burst Characteristics		
Carrier signal	channel A signal	
Trigger signal	TTL_A signal	
Burst count	1~65000 cycles	
Burst mode	Internal TTL, External, Single	
Output Characteristics of Channel B	Waveform Characteristics	
	Waveform type	32 waveforms including: Sine, Square, Triangle, Ramp, Pulse etc.
	Waveform length	1024 points
	Sample rate	12.5MSa/s
	Waveform amplitude resolution	8bits
	Square duty cycle	1%~99%
	Frequency Characteristics	
	Frequency range	Sine: 1μHz~1MHz Other waveforms: 1μHz~100kHz
	Frequency resolution	1μHz
	Frequency accuracy	±(1×10 ⁻⁵)
	Amplitude Characteristics	
	Amplitude range	50mVpp~20Vpp (high impedance)
	Amplitude resolution	20mVpp
	Output impedance	50Ω
	Burst Characteristics	
Carrier single	channel B signal	
Trigger signal	TTL_B signal	
Burst count	1~65000 cycles	
Burst mode	Internal TTL, External, Single	
TTL Output	Waveform characteristics	Square, rise/fall times≤20ns
	Frequency characteristics	10mHz~1MHz
	Amplitude characteristics	TTL, CMOS compatible, low level<0.3V, high level>4V
General and Optional	Display	LCD display, English, Chinese (simplified), Chinese (traditional)
	Dimension (D×W×H)	415mm×295mm×195mm
	Weight	3.5kg
	Remote interface (optional)	RS232 serial interface
	Frequency counter (optional)	Testing frequency range: 1Hz~200MHz; Input signal amplitude: 100mVpp~20Vpp
	Power amplifier (optional)	Max. output power: 7W (8Ω), 1W (50Ω); Max. output voltage: 22Vpp; Frequency bandwidth: 1Hz~200kHz