Arbitrary Waveform/Function Generator

MEGATEK™

Specifications

Model	MFG-2205P	MFG-2210P	MFG-2215P	MFG-2220P
Frequency range	**1μHz~5MHz**	**1μHz~10MHz**	**1μHz~15MHz**	**1μHz~20MHz**
Waveform (CHA)				
Type	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc. And 8 user-defined arbitrary waveforms			
Length	1024 points			
Vertical resolution	8 bits			
Sampling rate	100MSa/s			
Harmonic distortion of sine	≥40dBc (<1MHz); ≥35dBc (1~20MHz)			
Total distortion of sine	≤1% (20Hz~200kHz)			
Rise/fall time of square	≤35ns			
Overshoot of square	≤10%			
Duty cycle of square	1%~99%			
Frequency (CHA)				
Range Sine	1μHz~5MHz	1μHz~10MHz	1μHz~15MHz	1μHz~20MHz
Square		1μHz~5MHz		
Other		1μHz~1MHz		
Resolution	1μHz			
Accuracy	$\pm 5\times10^{-5}$			
Stability	$\pm 5\times10^{-6}$ /3hours			
Amplitude (CHA)				
Range	2mVpp~20Vpp, 1μHz~10MHz (high impedance) 2mVpp~15Vpp, 10MHz~15MHz (high impedance) 2mVpp~8Vpp, 15MHz~20MHz (high impedance)			
Resolution	20mVpp (amplitude>2Vpp); 2mVpp (amplitude<2Vpp)			
Accuracy	± (1%+2mVrms) (high impedance, RMS, frequency 1kHz)			
Stability	±0.5% /3hours			
Flatness	±5% (frequency <10MHz); ±10% (frequency >10MHz)			
Output impedance	50Ω			
DC Offset (CHA)				
Range	±10V (high impedance, attenuation 0 dB)			
Resolution	20mVdc			
Accuracy	±(1%+20mVdc)			
Sweep (CHA)				
Parameter	Frequency, Amplitude			
Range	Free to set starting point and end point			
Time	100ms~900s			
Direction	Up, Down, Up-Down			
Mode	Linear, Logarithmic			
Control	Auto sweep or manual sweep			
Frequency Modulation (FM) (CHA)				
Carrier signal	CHA signal			
Modulation signal	CHB or external signal			
FM deviation	0%~20%			
Burst (CHA)				
Carrier signal	CHA signal			
Trigger signal	TTL_A signal			
Burst counts	1~65000 cycles			
Trigger mode	Internal TTL, External, Single			

Arbitrary Waveform/Function Generator

MEGATEK™

Model	MFG-2205P	MFG-2210P	MFG-2215P	MFG-2220P
Shift keying (CHA)				
FSK	Free to set the hop frequency and the carrier frequency			
ASK	Free to set the hop amplitude and the carrier amplitude			
PSK	Hop phase: 0~360°, resolution: 1°			
Alternative rate	10ms~60s			
Waveform (CHB)				
Type	32 built-in waveforms, including Sine, Square, Triangle, Ramp, Pulse, etc. And 8 user-defined arbitrary waveforms			
Length	1024 points			
Vertical resolution	8 bits			
Sampling rate	12.5MSa/s			
Duty cycle of square	1%~99%			
Frequency (CHB)				
Range	Sine: 1μHz~1MHz; Other: 1μHz~100kHz			
Resolution	1μHz			
Accuracy	$\pm 1\times 10^{-5}$			
Amplitude (CHB)				
Range	50mVpp~20Vpp (high impedance)			
Resolution	20mVpp			
Output impedance	50Ω			
Burst (CHB)				
Carrier signal	CHB signal			
Trigger signal	TTL_B signal			
Burst counts	1~65000 cycles			
Trigger mode	Internal TTL, External, Single			
TTL output				
Waveform	Square, rise/fall time ≤20ns			
Frequency	10mHz~1MHz			
Amplitude	TTL, CMOS compatible, low<0.3V, high>4V			
Frequency counter				
Testing frequency range	1Hz~200MHz			
Input signal amplitude	100mVpp~20Vpp			
Remote control	RS-232 interface			
Power amplifier (optional)				
Max. output power	7W (8Ω), 1W (50Ω)			
Max. output voltage	22Vpp			
Frequency bandwidth	1Hz~200kHz			
General				
Operation characteristics	Key operation for all functions, Menu display, Rotary dial adjustment			
Display	TFT LCD			
Language	English, Chinese (simplified), Chinese (traditional)			
Power source	AC110V/220V±10% selectable, 50/60Hz, Max. 45VA			
Environmental condition	0~40°C, <80%RH			
Standard accessories	Power cord ×1, Operation manual ×1, Software CD ×1, RS-232 cable ×1, BNC-BNC cable ×1, Test lead ×1			
Dimension	415×295×195mm			
Weight	3.5kg			