

Function Signal Generator

Function Signal Generators

Model: 2003A 2004A 2006A



Features

Wave Form Features	2003A	2004A	2006A
Wave form type	Sine, square, triangle, pulse, noise, and arbitrary waves (including DC). 32 kinds of arbitrary waves and 50 kinds of user-defined waves		
Wave form length	8192 points		
Wave form sampling rate	200 Msa/s		
Wave form vertical resolution	13 bits		
Sine wave	Harmonic suppression $\geq 45\text{dBc}$ (<1MHz); $\geq 40\text{dBc}$ (1MHz-20MHz) Total harmonic distortion <0.8%(20Hz-20KHz.0dBm)		
Square/Pulse wave	Overshoot $\leq 5\%$		
Pulse wave	Duty cycle adjustment 0.1%-99.9%		
Ramp wave	Linearity Degree: $\geq 98\%$ (0.01Hz~10kHz)		

Output Features

Amplitude range	Frequency $\leq 10\text{MHz}$	2mV-20Vpp
	10MHz \geq Frequency $\leq 30\text{MHz}$	2mV-10Vpp
	Frequency $\geq 30\text{MHz}$	2mV-5Vpp
Amplitude resolution	1mV	
Amplitude stability	$\pm 1\%$ set value $\pm 1\text{mVpp}$	
Flatness of amplitude	$\pm 0.4\text{dB}$ <10MHz	
	$\pm 1.0\text{dB}$ $\geq 10\text{MHz}$	
Output impedance	50 Ω $\pm 10\%$ (Typical)	
Protection	All signal outputs can work with 60 when the load is short circuited	
Amplitude range	Frequency $\leq 10\text{MHz}$	2mV-20Vpp
	10MHz \geq Frequency $\leq 30\text{MHz}$	2mV-10Vpp
	Frequency $\geq 30\text{MHz}$	2mV-5Vpp
Amplitude resolution	1mV	

Burst features

Output channel	CH1 or CH2, default CH1
Carrier wave	Sine, square, ramp, pulse, and arbitrary waveforms (excluding DC)
Pulse count	1~65535 or infinite, gated
Start/Stop phase	0~360°
Internal period	1 μs ~500s
Gating source	External
Trigger source	Internal, external, manual operating
Output channel	CH1 or CH2, default CH1

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Specifications

Model	2003A	2004A	2006A
Sine wave frequency	1μHz-25MHz	1μHz-40MHz	1μHz-60MHz
Square/Triangle wave frequency	1μHz-15MHz	1μHz-15MHz	1μHz-15MHz
Pulse wave frequency	100μHz-6MHz	100μHz-6MHz	100μHz-6MHz
Arbitrary wave frequency	1μHz-6MHz	1μHz-6MHz	1μHz-6MHz
Noise (-3dB)	7MHz bandwidth		
Min. frequency resolution	1uHz		
Frequency accuracy	±5ppm		
Frequency stability	±1ppm/3hours		
Modulation model	AM/ FM / PM / ASK / FSK / PSK		

DC Offset

Offset adjustment range	Output amplitude>0.1V	±10Vpk, ac + dc
	2mV<Output amplitude≤0.1V	±0.250Vpk, ac + dc
Offset resolution	1mV	

Phase

Phase adjustment range	0~359.9°
Phase resolution	0.1°

Measurement

Frequency function	Range 1Hz~100MHz/Gate Time 0.01S~10s continuous adjustment
Counter function	Range: 0-4294967295 / DC/AC coupling / Manual operation
Input signal voltage range	2vpp~20vpp
Pulse measurement	Resolution: 1ns, up to 20s
Period measurement	Resolution 1ns, up to 20s

Sweep

Sweep channel	CH1 or CH2
Sweep type	Linear sweep, Logarithmic sweep
Sweep time	0.1s~500.000s
Setting range	1μHz~Maximum carrier frequency
Sweep direction	Forward, backward

Trigger Input

Signal range	2vpp~20vpp
coupling	AC or DC

General Information

Model	2003A	2004A	2006A
Display	3.5-inch TFT Colored LCD, resolution: 480x320		
Language	Chinese/ English		
Interface	RS232, USB device, USB host(optional), USB flash disk		
Power supply	220V±10%, 45~65Hz, Or Optional 110V±10%, 45~65Hz		
Product size	194mmx178mmx69mm		
Product weight	2kg		
Standard accessories	Manual, software CD, power adaptor, BNC cable		
Optional accessories	BNC alligator clip, cabinet installation suit, RS232 cable, USB cable		