KEYSIGHT TECHNOLOGIES (AGILENT HP)

33220A

The Keysight (Agilent) 33220A is a single-channel 20 MHz function/arbitrary waveform generator for benchtop test and measurement. It provides standard functions, pulse generation with variable edge, and 14-bit arbitrary waveforms at up to 50 MSa/s with 64 Kpoints of memory.

SPECIFICATIONS

General

Interfaces	USB, GPIB, LAN
Display	Graphical LCD with graph mode

Physical

Power Supply	100–240 VAC, 50/60 Hz (autoranging)
Operating Temperature	0 °C to 55 °C °C

General Signal Generation

Channels	1
Standard waveforms	Sine, square, ramp, pulse, noise, DC
Pulse waveform	Pulse generation with variable edge
Arbitrary waveform capability	Yes (user-defined arb)
Output impedance	50 Ω nominal
Amplitude range (High Z)	20 mVpp to 20 Vpp
Amplitude range (50 Ω)	10 mVpp to 10 Vpp
DC offset range (High Z)	±10 V
DC offset range (50 Ω)	±5 V
Sine and square capability	20 MHz sine and square waveforms
Ramp/triangle capability	Ramp and triangle waveforms
Noise waveform (built-in)	Noise waveform available
DC waveform	DC output waveform available

Sine Wave Performance

Max sine frequency	20 MHz

Square and Pulse Performance

Max square frequency	20 MHz

Arbitrary Waveform

Sample rate (arb)	50 MSa/s
Vertical resolution (arb)	14-bit
Memory depth (arb)	64 Kpoints

Modulation, Sweep, and Burst

Modulation types	AM, FM, PM, FSK, PWM
Sweep types	Linear, logarithmic
Burst	Burst operation supported

I/O and Interfaces

Main output connector	BNC
Remote interfaces (included)	USB, GPIB, LAN

User Interface and Storage

Display capability	Graph mode for visual verification of signal settings

Software and Drivers

Remote programming	SCPI command set
Instrument control software	IntuiLink software included
Waveform editor compatibility	IntuiLink Waveform Editor add-in

Power and Physical

Power input	100–240 VAC, 50/60 Hz