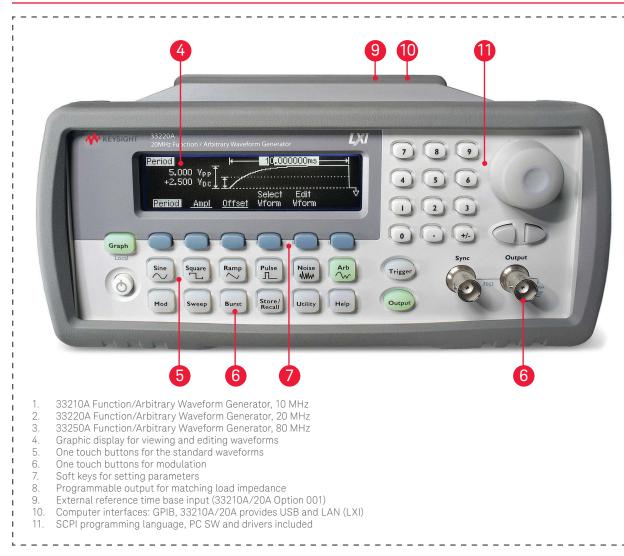
Product Fact Sheet Keysight 33210A/20A/50A Function/Arbitrary Waveform Generators



Key features

- Standard waveforms included: sine, square, pulse, noise, ramp, DC, triangle
- Arbitrary waveforms with up to 64 K-points of memory
- 33210A has an optional 8K point arbitrary waveform generator
- Standard modulations AM and FM on all instruments, FSK, PWM and PM on select models
- Linear/log sweep and burst
- Free IntuiLink Arbitrary Waveform Software





	33210A	33220A	33250A
Frequency range	1 mHz to 10 MHz	1 μHz to 20 MHz	1 μHz to 80 MHz
(sine and square)			
Arb resolution and sample	14-bit, 50 MSa/s	14-bit, 50 MSa/s	12-bit, 200 MSa/s
rate	(Option 002)		
Harmonic distortion	–70 dBc (DC to 20 kHz)		-60 dBc (DC to 1 MHz)
Linear ramp rate	Up to 100 kHz	Up to 200 KHz	Up to 1 MHz
Phase noise	–115 dBc/Hz		< -65 dBc (10 MHz)
Square wave duty cycle	20 % to 80 %		
Pulse frequency range	1 mHz to 5 MHz	500 µHz to 5 MHz	500 µHz to 50 MHz
Modulation carrier	Sine, square	Sine, square, ramp, and arb	
waveforms			
Modulation capability	AM, FM, PWM, Burst	AM, FM, PM, FSK,	AM, FM, FSK, Burst
		Burst, PWM	
Amplitude range	10 mVpp to 10 Vpp into 50 Ω load		
Amplitude accuracy	± 2 %, ± 1 mVpp	± 1%, ± 1 mVpp	
Frequency accuracy	20 ppm + 3 pHz		2 ppm
External timebase	Option 001		Standard
reference			
Interface	GPIB, LAN, USB		GPIB, RS-232

34970A/34972A plug-in modules

Part	Description
33210A Option 001	External timebase reference
33210A Option 002	8 K point Arbitrary Waveform Generator
33220A Option 001	External timebase reference
34131A	Carrying case
34161A	Accessory pouch
34190A	Rack mount kit (½ width)
10833A/B/C/D/F/G	GPIB cable
82350B	PCI high-performance GPIB card
82351A	PCIe-GPIB interface card
82357B	USB/GPIB interface (33250A only)
E5810A	GPIB to LAN gateway (33250A only)

- Uncompromising performance

- Standard waveforms
- Arbitrary waveforms

- Pulse waveforms

- Graphical display



Three-Year Warranty

WARRANTY

www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans

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Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.



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