



AFG3000 Series Arbitrary/Function Generators

Intuitive GUI, Shortcut Keys, Simple Menus, 12 Standard Functions



► Features & Benefits

- Up to 240 MHz sine waves
- Up to 120 MHz pulse waves
- Up to 2 GS/s arbitrary waveforms
- Modulation, Sweep and Burst Modes
- Large color display provides all the relevant settings at a single glance (monochrome on AFG3021)
- Detailed display of waveform shape, modulation, and trigger signal with time and amplitude scale gives full confidence in signal settings
- USB storage devices plug in the front panel to extend storage capacity and save waveforms and instrument settings
- Shortcut keys provide direct access to frequently used functions and parameters
- Context-sensitive help allows the user to learn about various features and functions

- Dual-channel models save cost and bench space
- Pulse Generator, with variable edge times as short as 2.5 ns
- Noise generator to add variable noise in each channel
- Trigger/Sync Inputs and Outputs
- Sum-input to add external signal to output
- Selectable User Interface Language

► Applications

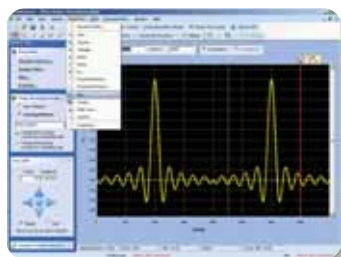
- Electronic Test and Design
- Sensor Simulation
- Functional Test
- Education and Training



Stackable
AFG3000 Series instruments stack perfectly with TDS1000/2000/3000 Oscilloscopes.



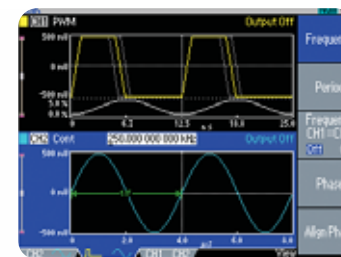
Compact
13" wide (330 mm)
6.2" high (156 mm)
6.6" deep (168 mm).



ArbExpress™ Software
 With this PC software, custom waveforms can be created and modified with ease, imported seamlessly from any Tektronix oscilloscope or defined via equation editor, free hand, point draw and waveform math.



Waveform Parameters
 View waveform parameters of channel 1 and 2 simultaneously (dual channel models).



Waveform Graph
 View waveforms of channel 1 and 2 simultaneously (dual channel models).

► **Ordering Information**

AFG3021, AFG3022, AFG3101, AFG3102, AFG3251, AFG3252.

Standard Accessories: quick start user manual, calibration certificate, CD-ROM with reference user manual, service manual and ArbExpress™ software.

Customers specify power plug and quick start manual version when ordering.

Options

International Quick Start User Manuals

- Opt. L0 – English.
- Opt. L1 – French.
- Opt. L2 – Italian.
- Opt. L3 – German.
- Opt. L4 – Spanish.
- Opt. L5 – Japanese.
- Opt. L7 – Simplified Chinese.
- Opt. L8 – Traditional Chinese.
- Opt. L9 – Korean.
- Opt. L10 – Russian.

Recommended Accessories

- RM3100 - Rackmount kit.
- 013-0345-00 - Fuse adapter, BNC-P to BNC-R.
- 159-0454-00 - Fuse set, 3pcs, 0.125A.

Warranty

Three years warranty on parts and labor.

► **Key Product Specifications**

Product	AFG3021	AFG3022	AFG3101	AFG3102	AFG3251	AFG3252
Channels	1	2	1	2	1	2
Waveforms	Sine, Square, Pulse, Arb, Ramp, Sin(x)/x, Gaussian, Lorenz, Exponential Rise/Decay, Haversine, Noise					
Sine	1 mHz to 25 MHz		1 mHz to 100 MHz		1 mHz to 240 MHz	
Square/Pulse/Arb	1 mHz to 12.5 MHz		1 mHz to 50 MHz		1 mHz to 120 MHz	
Other waveforms	1 mHz to 250 kHz		1 mHz to 1 MHz		1 mHz to 2.4 MHz	
Noise bandwidth	25 MHz		100 MHz		240 MHz	
Arb sample rate (waveform length)	250 MS/s		1 GS/s (≤16K) 250 MS/s (>16K)		2 GS/s (≤16K) 250 MS/s (>16K)	
Waveform memory	4 x 2 to 64K		4 x 2 to 128K			
Modulation	AM, FM, PM, FSK, PWM					
Frequency resolution	1 μHz or 12 digits					
Timebase stability	± 1 ppm per year					
Vertical resolution	14 bits					
Sweep	lin, log					
Amplitude into 50	10 mV _{p-p} to 10 V _{p-p}		20 mV _{p-p} to 10 V _{p-p}		≤200 MHz: 50 mV _{p-p} to 5 V _{p-p} >200 MHz: 50 mV _{p-p} to 4 V _{p-p}	
Amplitude resolution	0.1 mV _{p-p} or 4 digits					
Add input	–		Yes			
Interface	USB		USB, LAN, GPIB			
Price	\$1,780	\$2,700	\$3,600	\$4,800	\$6,400	\$8,500

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