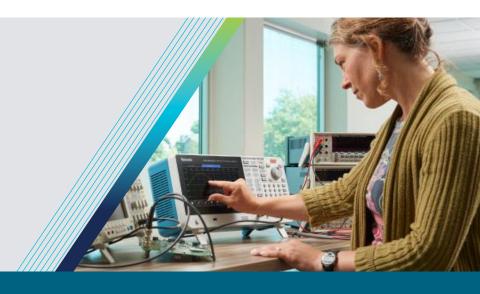
Tektronix[®]

www.tek.com/AFG31000

BETTER TESTING. FASTER.

AFG31000 Series Arbitrary/Function Generator



Are you a researcher or engineer generating increasingly complex tests to debug, troubleshoot, validate, and/or characterize your designs? Tektronix has redefined the arbitrary/function generator with the new AFG31000 Series – a powerful, affordable, and easy-to-use AFG. It offers real-time waveform monitoring, optional programmable waveform sequencing, and the industry's first AFG touchscreen to significantly boost productivity and efficiency.



The large capacitive touchscreen and built-in ArbBuilder tool enables users to create and edit arbitrary waveforms right on the instrument.

APPLICATIONS

- Analog circuit characterization
- Replication of real world signals
- Function verification and performance characterization
- · Clock and system synchronization
- Pulses to drive power devices
- Advanced research and education
- Embedded circuit design and test
- General purpose signal generation

SAVE TIME AND EFFORT WITH THE NINE-INCH TOUCHSCREEN

The AFG31000 Series features the industry's largest AFG touchscreen; pinch, zoom, and scroll just like a smart device to easily locate settings and parameters on the simple menu or shortcuts to frequently-used settings.

VERIFY YOUR WAVEFORM AT THE DEVICE UNDER TEST

Patented InstaView[™] technology lets you see the actual waveform at the device under test (DUT) in real time – without an oscilloscope or probe – eliminating any uncertainty typically caused by mismatched impedance.

GENERATE MULTIPLE WAVEFORMS WITH COMPLEX TIMING

Advanced waveform generation and programming capabilities make it easy to compose a list or a sequence of 1 to 256 waveforms with total waveform length up to 16 Mpts/ch (128 Mpts/ch optional) and define the output sequence of these waveforms.

CREATE AND EDIT ARBITRARY WAVEFORMS ON THE AFG

The built-in ArbBuilder editing tool includes everything you need to create, edit, and transfer an ARB waveform without the need to connect to a PC.

AFG31000 Series Arbitrary/Function Generator

| Model | Analog Channels | Output Frequency | Output Amplitude into 50 Ω | Waveform Memory Size | Sample Rate |
|----------|-----------------|------------------|-----------------------------------|----------------------|-------------|
| AFG31021 | 1 | 25 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 250 MS/s |
| AFG31022 | 2 | 25 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 250 MS/s |
| AFG31051 | 1 | 50 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 500 MS/s |
| AFG31052 | 2 | 50 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 500 MS/s |
| AFG31101 | 1 | 100 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 1 GS/s |
| AFG31102 | 2 | 100 MHz | 1 mVpp to 10 Vpp | 16 MSa/ch | 1 GS/s |
| AFG31151 | 1 | 150 MHz | 1 mVpp to 5 Vpp | 16 MSa/ch | 2 GS/s |
| AFG31152 | 2 | 150 MHz | 1 mVpp to 5 Vpp | 16 MSa/ch | 2 GS/s |
| AFG31251 | 1 | 250 MHz | 1 mVpp to 5 Vpp | 16 MSa/ch | 2 GS/s |
| AFG31252 | 2 | 250 MHz | 1 mVpp to 5 Vpp | 16 MSa/ch | 2 GS/s |

Instrument Options

| -SEQ | License; Enables sequence mode; Node locked |
|------|---|
| -MEM | License; Extends arb memory to 128 Mpts; Node locked |

Post-Purchase Upgrade Options*

| AUP-AFG3SEQ | License; Enables sequence mode; Node locked |
|------------------------------|---|
| AUP-AFG3MEM | License; Extends arb memory to 128 Mpts; Node locked |
| AUP-AFG3BW25T50 | License; Bandwidth extension from 25 MHz to 50 MHz; Node locked |
| AUP-AFG3BW25T100 | License; Bandwidth extension from 25 MHz to 100 MHz; Node locked |
| AUP-AFG3BW50T100 | License; Bandwidth extension from 50 MHz to 100 MHz; Node locked |
| AUP-AFG3BW150T250 | License; Bandwidth extension from 150 MHz to 250 MHz; Node locked |
| *Use suffix for all options: | |

-1 for one-channel models

-2 for two-channel models

Standard Accessories

AFG31000 Series Generators Compliance and Safety Instructions Power cord USB cable BNC cables NIST-traceable calibration certificate Three-year warranty on parts and labor

Recommended Accessories

| 012-1732-xx | BNC cable shielded, 3 ft. |
|-------------|---------------------------------------|
| 012-0991-xx | GPIB cable, double shielded |
| 011-0049-02 | 50 Ω BNC terminator |
| ACD4000B | Soft transit case |
| HCTEK54 | Hard transit case (requires ACD4000B) |

Service Options

| Opt. C3 | Calibration Service 3 Years |
|---------|--|
| Opt. C5 | Calibration Service 5 Years |
| Opt. D1 | Calibration Data Report |
| Opt. D3 | Calibration Data Report 3 Years (with Opt. C3) |
| Opt. D5 | Calibration Data Report 5 Years (with Opt. C5) |
| Opt. R5 | Repair Service 5 Years (including warranty) |
| Opt. T3 | 3 Year Total Protection Plan |
| Opt. T5 | 5 Year Total Protection Plan |
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