AFG3000C Series vs. Rigol DG5000
Competitive Fact Sheet

Reduced Set-up and Evaluation Time

Tektronix AFG3000C

- ✓ **6 Shortcut buttons** including **Frequency/Period, Amplitude/High, Offset/Low, Duty/Width, Leading/Trailing, Phase/Delay,** providing direct access to frequently-used parameters
- ✓ Free ArbExpress and Signal Express Software provide tools that enable seamless connection between multiple Tektronix oscilloscopes and the AFG3000C.

Rigol DG5000

- ✗ **No Shortcut buttons** – Does not offer shortcut buttons. Users must navigate with screen bezel buttons to access frequently-used parameter settings.
- ✗ Rigol Ultra Station software doesn't directly support waveform transfer from oscilloscopes to the signal generator.

More Guaranteed Specifications

Tektronix AFG3000C

- ✓ **These specification are guaranteed:**
  - Harmonic Distortion
  - Spurious
  - Rise/Fall Time
  - Amplitude Accuracy
  - Output Impedance

Rigol DG5000

- ✗ **These specification are typical:**
  - Harmonic Distortion
  - Spurious
  - Rise/Fall Time
  - Amplitude Accuracy
  - Output Impedance

Key Specifications Comparison

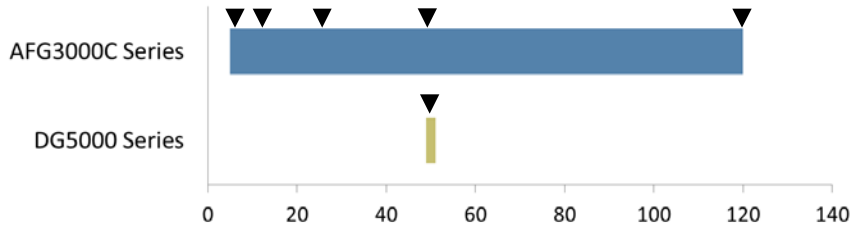
	Tektronix AFG3000C		**Rigol** DG5000	
Channels	✓	1, 2	✓	1, 2
Bandwidth (MHz)	✗	10, 25, 50, 100, 240	✓	70, 100, 250, 350
Record Length	✗	128K points	✓	16M/128M points
Max Sampling Rate	✓	AFG3011C: 250MS/s AFG302xC: 250MS/s AFG305xC: 1GS/s AFG310xC: 1GS/s AFG325xC: 2GS/s	✗	All models: 1GS/s
Connectivity	✓	USB, GPIB, LAN	✓	USB, GPIB, LAN
Max Output Voltage Into 50 Ω	✓	AFG3011C: 20Vpp AFG302xC: 10Vpp AFG305xC: 10Vpp AFG310xC: 10Vpp AFG325xC: ≤ 200MHz: 5Vpp > 200MHz: 4Vpp	✓	≤ 100MHz: 10Vpp ≤ 300MHz: 5Vpp ≤350MHz: 2Vpp

Tektronix

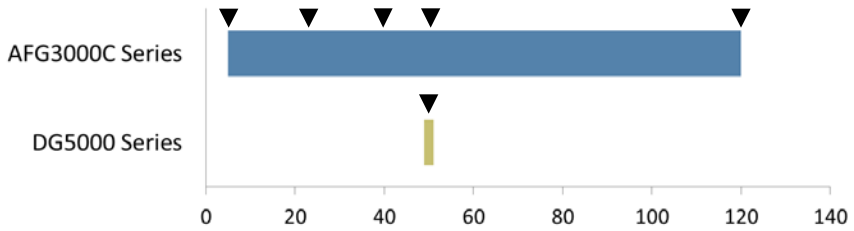
AFG3000C Series vs. Rigol DG5000
Competitive Fact Sheet

▼ Model Max Frequency

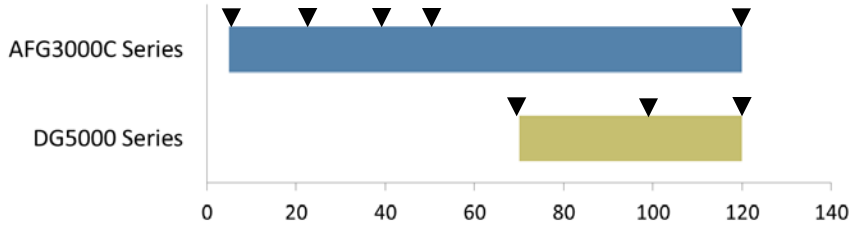
Tektronix offers more arbitrary waveform frequencies



Tektronix offers more pulse frequencies



Tektronix offers more square wave frequencies



Wider Pulse Duty Cycle Range

Tektronix AFG3000C

✓ 0.001% to 99.999% (Limitations of pulse width apply).

Rigol DG5000

✗ ≤10 MHz：20.0% to 80.0%
10 MHz-40 MHz：40.0% to 60.0%
>40 MHz：50.0% (fixed)

Total Harmonic Distortion

Tektronix AFG3000

✓ <0.2%

Rigol DG5000

✗ <0.5%

Tektronix