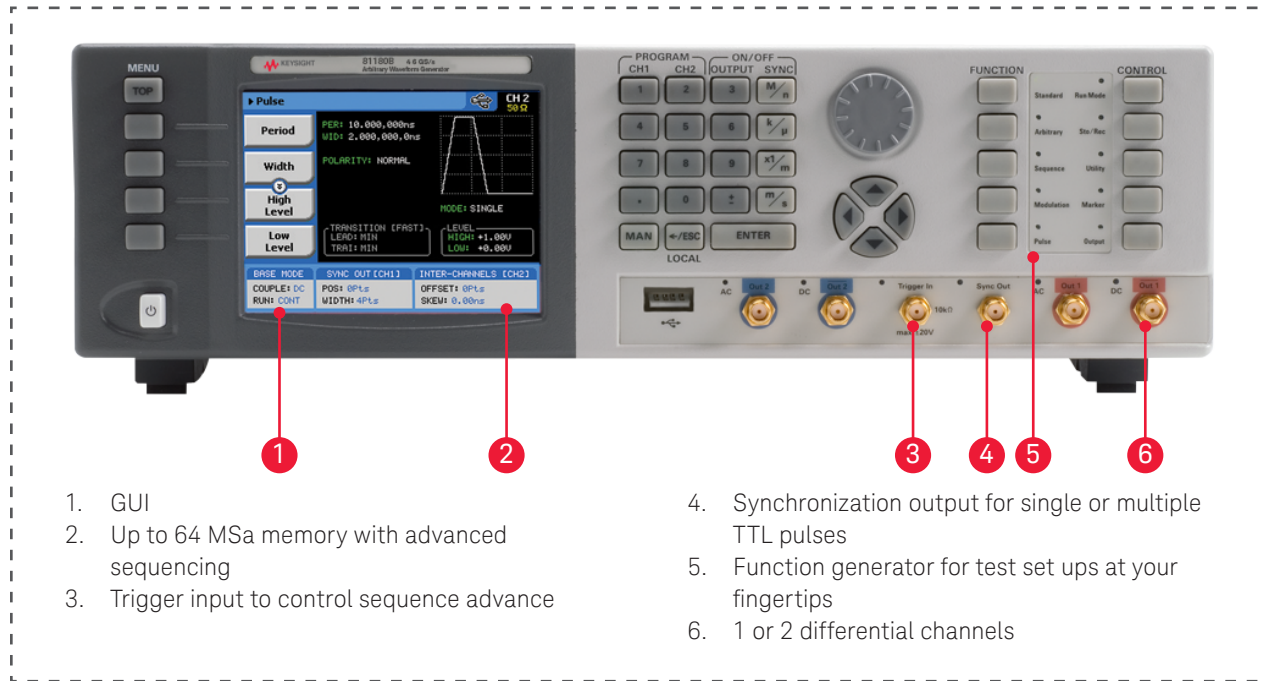


# Keysight 81180B Arbitrary Waveform Generator

1 GHz modulation bandwidth/channel and 12 bit vertical resolution



## Essential specifications

Option	Description
Max. sample rate	10 MS/s to 4.2 GS/s (variable)
Resolution	12 bit
Sample memory	16/64 MSa
IQ amplifier	<ul style="list-style-type: none"> <li>- 2 GHz I/Q modulation bandwidth</li> <li>- Differential, DC coupled</li> <li>- Amplitude: fixed 1 Vpp</li> <li>- SFDR: 66 dBc</li> </ul>
Maximum bandwidth amplifier	<ul style="list-style-type: none"> <li>- 1.5 GHz bandwidth</li> <li>- Singled-ended, AC coupled</li> <li>- SFDR &gt; 60 dBc</li> </ul>
Time domain amplifier	<ul style="list-style-type: none"> <li>- Differential, DC coupled</li> <li>- Variable amplitude up to diff. 4 Vpp</li> </ul>
Sequencing	<ul style="list-style-type: none"> <li>- 16 k segments, loops, jumps, 32 k</li> <li>- Sequence steps, 256 scenarios,</li> <li>- 8-bit dynamic sequence control input</li> </ul>
Software	<ul style="list-style-type: none"> <li>- MatLab, LabView, C/C++/C#</li> <li>- Signal Studio (Pulse builder/Multione)</li> </ul>
MSRP	<ul style="list-style-type: none"> <li>- \$47,849 (1 ch/16 MSa)</li> <li>- \$83,864 (2 ch/64 MSa)</li> </ul>

- High bandwidth: 1 GHz modulation bandwidth/channel, 2 GHz I/Q modulation bandwidth and 1.5 GHz carrier frequency.
- Reliable and repeatable measurements through best dynamic range and low harmonic distortion. Markers don't reduce DAC resolution.
- 2 Vpp into 50 Ω For many test cases and devices.
- 1, 2 or 4 channels. Combine 2 channels phase coherent or use them as two independent instruments in a single box. Two instruments can be combined to a 4 channel instrument.
- 3 software selectable amplifier optimized for different applications requiring different signal characteristics.
- Advanced sequencing for best usage of 64 MSa for real-world signals.
- Dynamic sequence control let your application control the waveform – in real time.
- 10 pre-defined waveforms speed up your measurements.

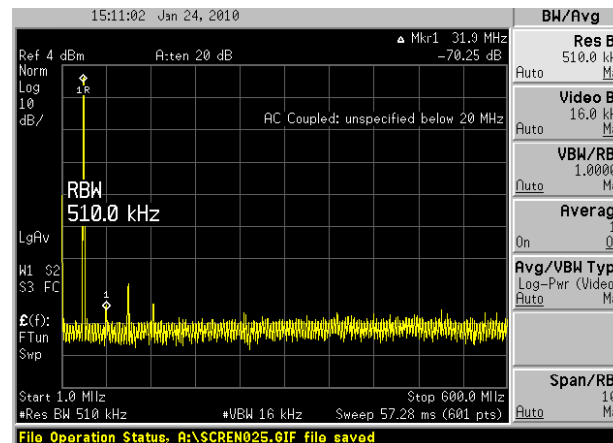
## Choose your hardware

Option	Description	MSRP
116	1 channel, 16 MSa memory	\$44,982
216	2 channel, 16 MSa memory	\$56,780
264	2 channel, 64 MSa memory	\$66,571
SYN	Synchronization cable to build up a 4 channel instrument out of two 81180B	\$1,116
F4G	Reconstruction filter set for 4 Gsa/s – 1 channel	\$894

Please consult with your distributor for final pricing.

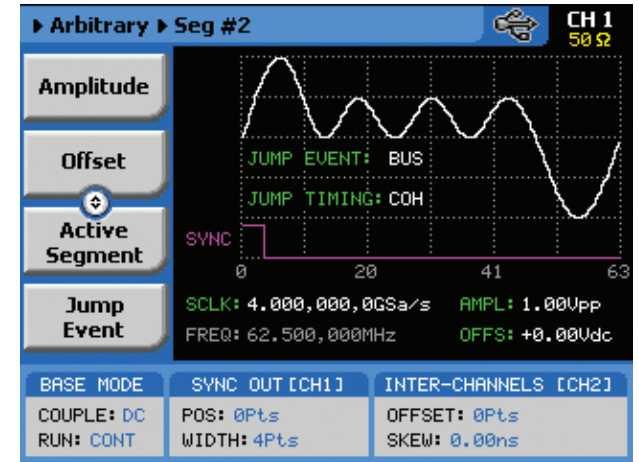
## Typical applications

- Wireless standards with > 1 GHz modulation BW (WiHD, WiGig, Bluetooth 2.0)
- RF environment simulation up to 1.5 GHz (e.g. DVB-T/H, T-DMB)
- UWB up to 2 GHz modulation BW
- Software Defined Radio
- Satellite
- Radar
- General purpose function generator
- Education

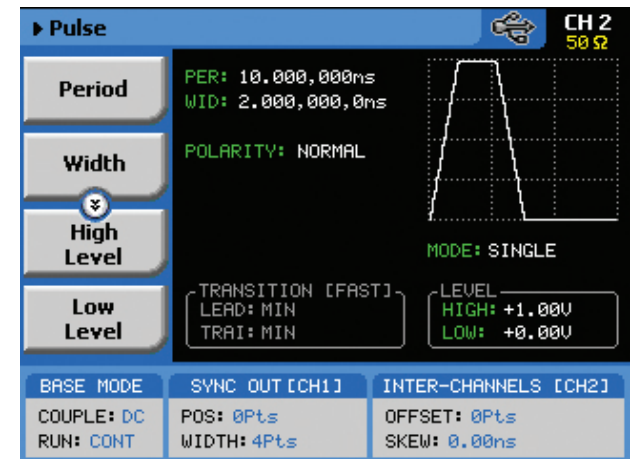


Spurious performance of 81180B

[www.keysight.com/find/81180](http://www.keysight.com/find/81180)



81180B AWG showing arbitrary waveform



81180B AWG showing pulse

### Three-Year Warranty

[www.keysight.com/find/ThreeYearWarranty](http://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

[www.keysight.com/find/AssurancePlans](http://www.keysight.com/find/AssurancePlans)

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.

