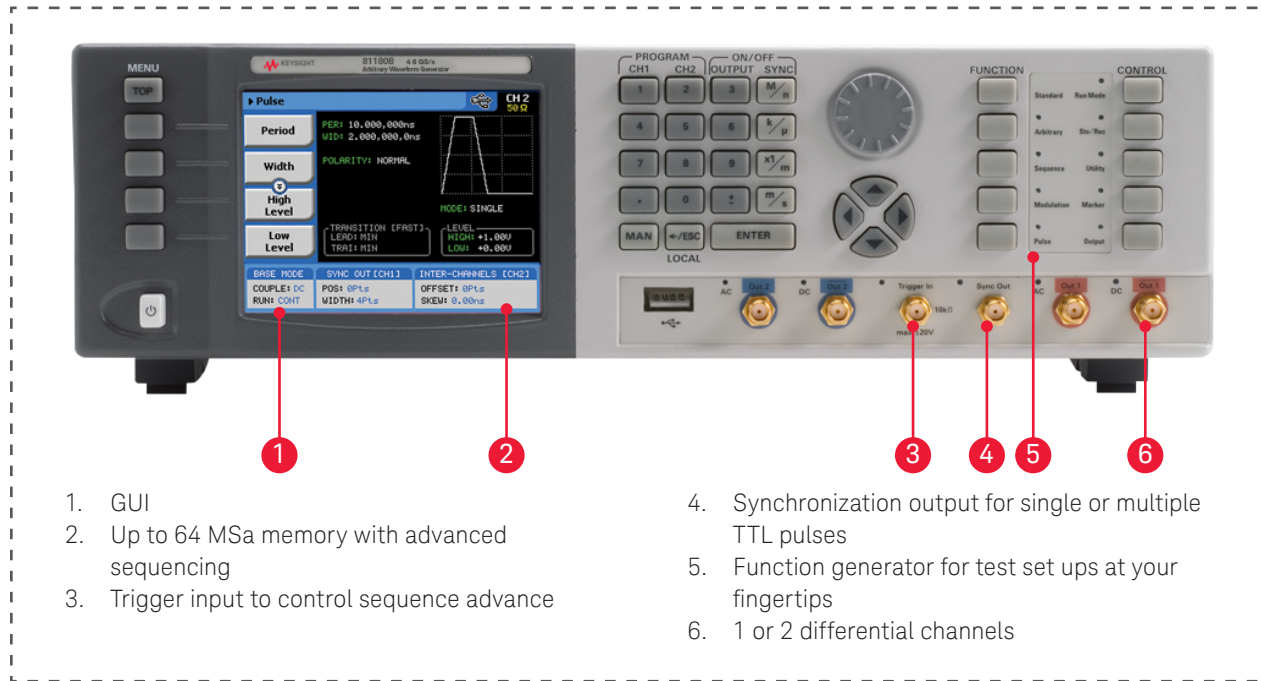


Keysight 81180B Arbitrary Waveform Generator

1 GHz modulation bandwidth/channel and 12 bit vertical resolution



Essential specifications

Option	Description
Max. sample rate	10 MS/s to 4.6 GS/s (variable)
Resolution	12 bit
Sample memory	16/64 MSa
IQ amplifier	<ul style="list-style-type: none"> - 2 GHz I/Q modulation bandwidth - Differential, DC coupled - Amplitude: fixed 1 Vpp - SFDR: 66 dBc
Maximum bandwidth amplifier	<ul style="list-style-type: none"> - 1.5 GHz bandwidth - Singled-ended, AC coupled - SFDR > 60 dBc
Time domain amplifier	<ul style="list-style-type: none"> - Differential, DC coupled - Variable amplitude up to diff. 4 Vpp
Sequencing	<ul style="list-style-type: none"> - 16 k segments, loops, jumps, 32 k - Sequence steps, 256 scenarios, - 8-bit dynamic sequence control input
Software	<ul style="list-style-type: none"> - MatLab, LabView, C/C++/C# - Signal Studio (Pulse builder/Multione)

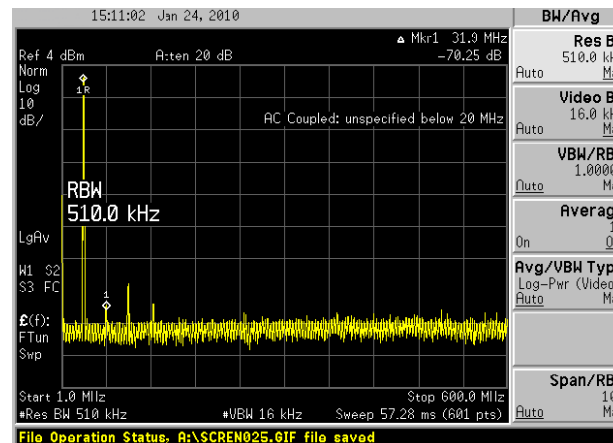
- High bandwidth: 1 GHz modulation bandwidth/channel, 2 GHz I/Q modulation bandwidth and 1.5 GHz carrier frequency.
- Reliable and repeatable measurements through best dynamic range and low harmonic distortion. Markers don't reduce DAC resolution.
- 2 Vpp into 50 Ω For many test cases and devices.
- 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
116	1 channel, 16 MSa memory
216	2 channel, 16 MSa memory
264	2 channel, 64 MSa memory
SYN	Synchronization cable to build up a 4 channel instrument out of two 81180B
F4G	Reconstruction filter set for 4 Gsa/s – 1 channel

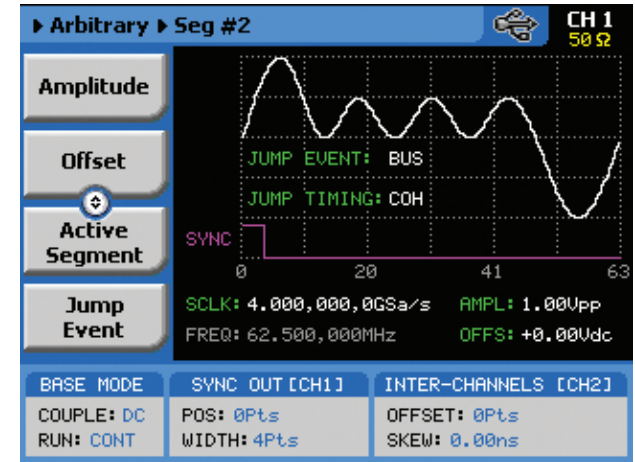
Typical applications

- 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

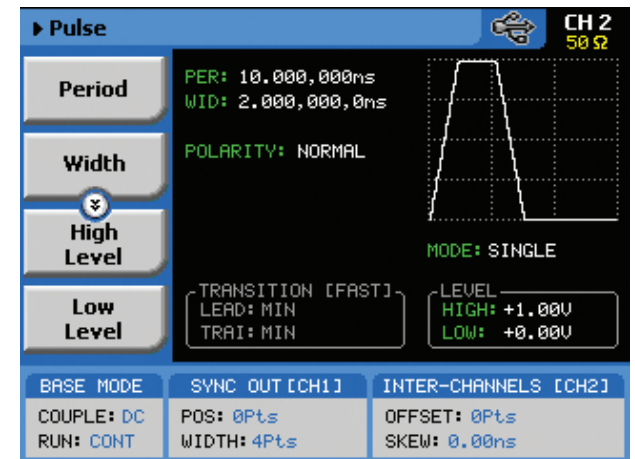


Spurious performance of 81180B

www.keysight.com/find/81180



81180B AWG showing arbitrary waveform



81180B AWG showing pulse

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Keysight Services helps you improve productivity and product quality with our comprehensive service offerings of one-stop calibration, repair, asset management, technology refresh, consulting, training, and more.