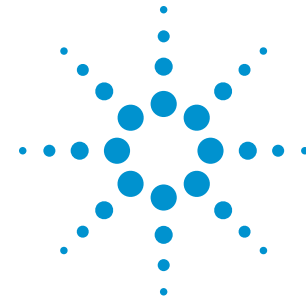


Agilent 81150A Pulse Function Arbitrary Noise Generator

Triple versatility, optimum signal fidelity—from anywhere at any time



1. Couple/uncouple channels/channel add
2. USB 2.0A
3. Channel 2: Trigger out; strobe out; differential output
4. Channel 1: Trigger out; strobe out; differential output
5. Trigger mode
6. Waveform mode
7. Advanced mode: modulation/sweep/burst
8. Keypad

A 3-in-1 device for accelerated and accurate insight into your device

- Create pulse, sine, square, ramp, noise and arbitrary waveforms to test your device—not the source.
- A 2 Channel version can be used either as 2 independent generators or as time synchronized coupled or added.
- Integrated in one instrument, which increases signal performance, minimizes cabling, space and test time.
- Glitch free change of timing parameters (delay, frequency, transition time, width, delay cycle).
- Programming language compatible with Agilent 81101A, 81104A and 81110A.

Standard, complete connectivity!
LXI Class C compliant

Key specifications	Description
Bandwidth	1 μHz to 120 MHz (250 sine)
Waveforms	Noise, adjustable crest factor, sine, pulse, square, vamp, arbitrary waveform
Channels	1 or 2, differential outputs
Output amplitude amplifier	
High voltage	50 mV to +10 V
High bandwidth	50 mV to +5 V
Modulation types	AM, FM, PM, FSK, PWM external and internal
Transition times	> 2.5 ns
Output impedance	50 Ω / 5 Ω selectable
Sample rate	14-bit, 2 G/s arbitrary waveform
Memory	Arbitrary: 512 k points per channel Pattern: 16 Mbit per channel
Noise repetition rate	26 days
Display	Color, bright
Programming interfaces	LAN, SCPI 1992, IEEE 488.2 (GPIB), USB
Supported drivers	Agilent VEE, IVI-COM, NI Labview, Matlab®

Choose your hardware

Code	Description
#001	81150A with 1 channel
#002	81150A with 2 channels
#DOC	Printed documentation
#1CP	Rack mount kit
#1A6	Z 540 calibration documents
#1A7	ISO 17025 calibration documents
#PAT	Pattern generator license



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Quick Fact Sheet

Pulse pattern generator selection guide

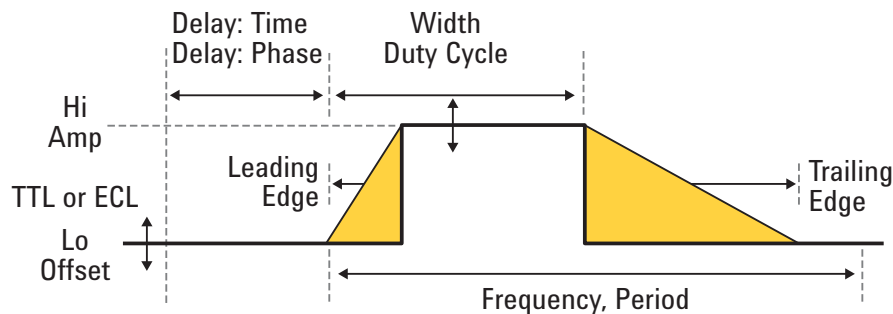
Model	Bandwidth	Channels	Voltage
81101A	50 MHz	1-ch	100 mV to 10 V
81104A + 81105A	80 MHz	1 or 2 ch	100 mV to 10 V
81110A + 81111A	165 MHz	1 or 2 ch	100 mV to 10 V
81110A + 81112A	330 MHz	1 or 2 ch	100 mV to 10 V
81130A + 81131A	400 MHz	1 or 2 ch	100 mV to 10 V
81130A + 81132A	660 MHz	1 or 2 ch	100 mV to 10 V

Complementary products

Model	Description
DSO/MSO 6000, 7000	InfiniiVision 7000 Series Oscilloscopes up to 1 GHz bandwidth
DSO/MSO 8604A	Infiniium DSO/MSO Oscilloscope with 800 MHz bandwidth
DSO/MSO 5000	InfiniiVision 5000 Series Oscilloscopes up to 500 MHz bandwidth
DSO 3000	Economy DSO 3000 Series up to 200 MHz bandwidth
32210A, 33220A, 33250A	Function generators with 10, 20 and 80 MHz, 1 channel

Characteristics on a pulse pattern shape

All parameters can be selected and edited with the Agilent Pulse Pattern Generators



www.lxistandard.org

LAN eXtensions for Instruments puts the power of Ethernet and the Web inside your test systems. Agilent is a founding member of the LXI consortium.

MATLAB is a U.S. registered trademark of the Math Works, Inc. PCI Express is a registered trademark of PCI-SIG.

Technical data, availability and pricing subject to change without notice.

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5990-4565EN

Typical applications

- FlexRay/CAN physical layer receiver test (Flyer: 5990-3160EN)
- Sensor simulation
- Clock signal generation
- Radar distance testing
- Disc drive tests
- Noise and jitter source with selectable crest factor
- Signal source with modulation
- Pulsed IV measurements
- System trigger source
- Capture and reproduce live signals

Related literature

Pub Number	Name
5989-6433EN	81150A Pulse Function Arbitrary Noise Generator Data Sheet
5980-0489E	Pulse Pattern and Data Generators For Digital and Analog Testing
5989-7860EN	Agilent 81150A Pulse Function Arbitrary Noise Generator Applications
5990-3233EN	PCI Express® Revision 2.0 Receiver Testing with J-BERT N4903A and 81150A Pulse Function Arbitrary Noise Generator
5989-9826EN	Agilent 15431A Filter Set for 81150A
5989-9364EN	Agilent 81150A Precision Digital Noise

Recommended service options

Additional two years of Return-to-Agilent warranty
 Additional two years of Return-to-Agilent calibrations
 For more information go to www.agilent.com/find/removealldoubt

www.agilent.com/find/81150



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