

AT-AWG PWR

1CH 1GS/s 16Bit High Current Arbitrary Waveform Generator

World Fastest High Current Arbitrary Waveform Generator

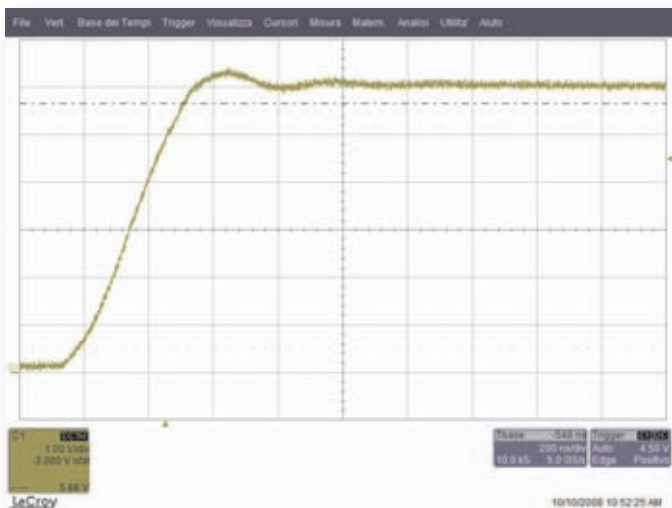
AT-AWG PWR is the world fastest waveform generator that combines high current output capability (600 mA continuous – 3A peak) with high sample rate (1GS/s) and high vertical resolution (16 bit).

The innovative hi-power output stage can directly drive the high capacitive power pins of devices under test. Moreover AT-AWG PWR can generate noise effects and any kind of high frequency disturbs over power supply line. High current capability and fast slew rate allow the user to perform several power-up and power down sequences breaking-through standard AWG limitations.

AT-AWG PWR has the AT-XSS (Extended Synchronous System) expansion system that provides the extendibility at up to 8 synchronous output without loss of performance: 8 channels @ 1GS/s.

By means of the AT-AWG PWR it is possible to generate fast power-up and power down sequences overcoming by-pass capacitor limitations:

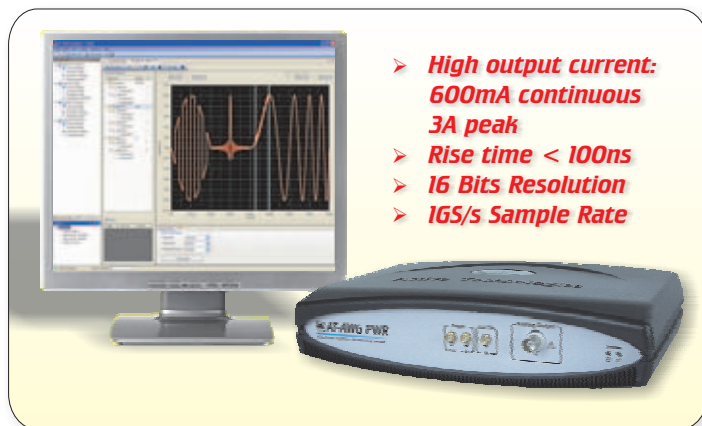
0-6V Step \Rightarrow < 400ns Rise Time @ 100nF Cap. Load



Power-up ramp over 100nF cap. load⁽¹⁾

AT-AWG Navigator Software

The AT-AWG Navigator provides full support for all AT-AWG PWR features in a workspace based environment with multiple display windows and advanced editing tools: all relevant waveform parameters and graphical waveshape at a single glance at your PC monitor.



- > **High output current: 600mA continuous 3A peak**
- > **Rise time < 100ns**
- > **16 Bits Resolution**
- > **1GS/s Sample Rate**

Features & Benefits

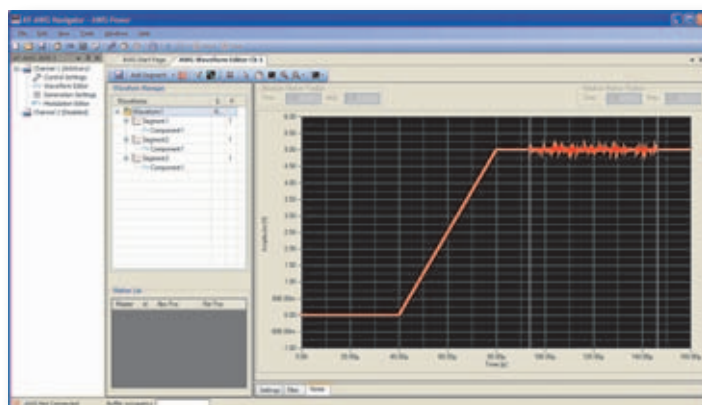
- > High Output Current: 600mA Continuous, 3A Peak
- > Unlimited Capacitive Load Drive Capabilities
- > High Slew Rate: < 400ns Rise Time @ 100nF Cap. Load
- > $\pm 8V$ Output Swing @ 600mA Load
- > High Frequency Noise Generation at DUT Supply Lines
- > 16 Bit, 1Gs/s Waveforms
- > 2 Million Samples
- > 16 Bits (n)ASK, (n)FSK, PWM, (n)PSK, (n)QAM
- > Triggering Modes: Single, Continuous, Stepped, Burst
- > True ARB & 36 Bits DDS
- > Multi-instrument Synchronization

Applications

- > Power-up μP Validation
- > Noise Generation Over Vcc Lines
- > Electronic Test and Design
- > Semiconductor Test

Software

- > Project navigator with multiple display windows
- > Complex waveform and modulation editors
- > Waveform sequence editor
- > Noise editor and waveform filtering editor
- > LabVIEW and C/C++ SDK (Software Development Kit)



Active Technologies

www.activetechnologies.it

Tech Specs:

Generation Mode:	Arbitrary or 36Bit DDS (Direct Digital Synthesis)
Sampling Frequency:	1GS/s (x4, x8 interpolation) 500MS/s (x2 interpolation) 250MS/s Real Time
Channels:	1
Output Current:	600mA Continuous, 3A Peak
Output Resistance:	< 100 mOhm
Rise Time:	< 400 ns with 100nF load
Output Bandwidth:	> 20MHz
Output Voltage Range:	±10V (10mA) ± 8V (600mA)
Sampling Frequency Prescaler:	1 to 32,768 in multiples of 2
Memory Depth:	2 MSamples
DAC Resolution:	16 Bits
Waveforms Length:	6 to 2,097,152 points
Number of Waveforms:	1 to 349,524
Sequence Length:	1 to 512 or infinite
Trigger Mode:	Single, continuous, stepped, burst
Modulation Type:	M-ASK, M-FSK, M-PSK and QAM
Minimum Frequency Resolution:	M-FSK: 0.00182 Hz M-PSK: $2.14E-5^\circ$ ($2\pi/2^{24}$ rad)
Programmable Amplitude vs Frequency Figure:	256 steps with programmable delta frequency and amplitude
Programmable Markers:	1,000,000 in ARB mode 1 horizontal marker in DDS mode
Digital Filters Effect (HP, LP, BS, BP):	Butterworth, Chebyshev, Inverse Chebyshev, Elliptic, Bessel
Digital Noise Effect:	Uniform, Gaussian, White, Poisson, Periodic random, Bernouilli, Gamma, Binomial
External I/O :	External Global Trigger input and output. Connector type: SMA 1 External clock input. Connector type: SMA AT-XSS expansion bus. Connector type: SCSI
Dimensions (WxLxH):	17.3 x 27.3 x 6.7 cm
Weight:	700g
Interface:	USB 2.0 (compatible with USB 1.1)

AT-AWG PWR is a test equipment instrument designed and made in Italy by Active Technologies. The company was founded in 2002 by a staff of engineers expert in semiconductor test equipment and instrumentation design.

Active Technologies is a supplier of innovative and avant-garde Automated Test Equipment and electronic instrumentation to world wide semiconductor company leaders.

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