

Programmable AC+DC Power Sources from DC to 1kHz AC

During research, development and testing of electronic products, the need to generate clean, well-controlled waveforms to power a product often fall outside the scope of the traditional mains supply. Many companies test with distorted, poorly controlled signals and perform measurement/evaluation and modification based on a low-quality signal source or even worse on power from the main socket which vary over time.

The signal source should be capable of generating pure sinusoids at different voltages depending on the test, or even harmonically distorted with a specific harmonic making the THD contribution to assess product immunity. In these cases, the N4A range of programmable AC power sources offer a flexible, rugged and high-performance power generation solution. N4L provide best value programmable power sources on the market, achieving market leading fidelity performance of <0.3% THD for sinusoidal wave form generation and unrivaled harmonic synthesis accuracy. Measurement of the generated waveforms can be made with the most accurate power analyzer on the market, the PPA5530, achieving phase accuracies of 0.005 deg.”

Offering complete flexibility for a wide range of applications including white goods testing, motor drive development, fully compliant EMC testing to IEC61000, aerospace, automotive, space exploration, robotics and much more.

Our power sources feature the ability to generate complex as well as pure sinusoidal wave forms. If you need to generate customized high-power wave forms, N4L will have a solution to meet your requirements.

Industries such as automotive, aerospace, and renewable energy have embraced the N4A due to the fact they offer affordable, highly reliable, rugged, high performance AC+DC power delivery.

For the EMC IEC61000 test market, a complete system including Impedance network, power Source, Power analyzer and software all from one manufacture you will get a complete plug and play solution with 100% responsibility from one company and world leading support all built and supported in Europe. N4L are the only manufacturer in the world to offer ISO17025 calibration of the impedance network, this is a key component for flicker testing.

- Wide Power Bandwidth; DC - 1kHz with 0.01deg res
- Output Power up to 100 KVA AC
- Output Voltage max. 300Vrms AC and +/- 425V DC
- High Inrush Current Capability (x2 nominal current)
- Full EMC IEC -61000 compliance
 - IEC61000-3-2 (Harmonics)
 - IEC61000-3-3 (Flicker)

- IEC61000-3-11 (Flicker)
 - IEC61000-3-12 (Harmonics)
 - IEC61000-4-11 (AC Dips + Interrupts)
 - IEC61000-4-13 (Harmonic and Interharmonic Immunity)
 - IEC61000-4-29 (DC Dips)
 - IEC61000-4-17 (DC Ripple)
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- The only fully ISO-17025 accredited test system on the market
 - Possible to calibrate inhouse with only a PPA55xx from N4L
 - Output Volt stability < 0.1Volt
 - Phase angle measurement of 5 milliDeg

<http://www.newtons4th.com/products/laboratory-power-amplifiers/>