# AC Source Rack Mount High-Voltage Power Systems



UltraVolt, Inc., a world-leading manufacturer of high-voltage power supplies and high-voltage power systems, announced today its newest high-voltage power systems – the HV Rack Advanced AC and HV Rack Advanced AC 3Phase Series. These unique systems are fully adjustable AC sources with up to three phases, offer currents up to 600A per phase, provide a digital display of all parameters, and include features such as user interface control and flicker simulation.

The HV Rack Advanced AC and HV Rack Advanced AC 3Phase Series are fully adjustable AC sources with up to three phases. The manually adjustable frequency range is between 0.1Hz and 2000Hz, which includes the often-used frequencies of 50Hz, 60Hz and 400Hz (including line sync) with the push of a button. The standard model provides a voltage range of 0-300VAC (425DC) at a power range of 250VA to 45kVA. The currents reach up to 80A per phase, wherein a high-current, controlled-current version of 600A is available. Alternatively, voltages up to 500VAC (700DC) or 700VAC (1kV DC) are available, where peak output currents are reduced by 40% and 50%, respectively. Both series have excellent control, provide data in a control accuracy of 0.1%, have a very low total harmonic distortion of 0.1%, and exhibit a programming voltage change with an accuracy of 100mV.

The HV Rack Advanced AC and HV Rack Advanced AC 3Phase Series generate any waveforms - including sine, square and triangle voltages - that users input into an external oscillator. User-defined wave forms can be read from an SD card via the external SD Card slot. Additionally, the user can access permanently stored waves.

Each system can be equipped with a variety of interfaces to provide universal connectivity and control including RS-232, RS-485, USB, IEEE 488, and LAN. The

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display automatically measures the output voltage, RMS current, average and peak current, active power, reactive power, apparent power, power factor and crest factor simultaneously. These systems are also available with isolated, self-calibrating 5V or 10V analog interfaces.

UltraVolt's new systems are ideal for laboratory and field testing. One function – flicker simulation – simulates brief power outages, which are one of the most common causes of machine failures. Power interruption often causes systems to shut down and can lead to a shift of phase angles. HV Rack Advanced AC and HV Rack Advanced AC 3Phase systems offer the possibility of individual phase angles with 0.1% accuracy independent from each other, making them able to simulate faults in the network.

"Companies and institutions world wide have found existing AC power sources limited in capability," stated James Morrison, CEO & Cofounder. "The new UltraVolt HV Rack Advanced AC single phase and 3 phase power systems feature higher output voltages and frequency ranges, expanding capability in a form to meet critical project requirements. Systems are deliverable in 4 to 6 weeks and made to application requirements!"

#### UltraVolt Inc.

631-471-4444; <u>www.ultravolt.com</u> [1]

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#### Links:

[1] http://www.ultravolt.com/