

Advanced Energy's 10 kW Power Supply With Advanced Pulsing Offers Industry's Most Precise, Customizable Plasma Control

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Ascent® SMS AP power supply with enhanced arc management and built-in process characterization capability can be configured to optimize throughput and yield

DENVER--(BUSINESS WIRE)-- Advanced Energy (Nasdaq:AEIS) – a global leader in highly engineered, precision power conversion, measurement and control solutions – has expanded its family of plasma power generators with a 10 kW pulsed DC power supply that combines industry-leading power and control capabilities with [PowerInsight by Advanced Energy™](#) embedded process optimization software. With patented pulsing technology, the Ascent® SMS AP (Advanced Pulsing) power supply brings optimal arc management and precise plasma control to the most challenging thin film deposition applications ranging from semiconductor to solar PV manufacturing.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20211207005067/en/>



(Photo: Business Wire)

The compact 10 kW Ascent SMS AP has the widest safe operating area (SOA)

with peak voltages up to 1200 V and frequencies from 0.5 to 150 kHz. Its four-block progressive arc management system with a full voltage reversal is the industry's most advanced solution, providing the lowest arc energy with available self-adjusting arc parameters that will dynamically move with the process. The AP waveform delivers boost voltage, reverse voltage control and advanced pulse shaping that enables fine-tuning to tailor film morphology and desired film properties.

“Advanced Energy continues to push the performance of pulsed DC power supplies with unprecedented adaptability in single-magnetron sputtering applications,” said Dhaval Dhayatkar, senior director of marketing, plasma power products at Advanced Energy. “Packed with our most advanced technologies including a highly configurable waveform, progressive arc management, best-in-class SOA, wide frequency range and our PowerInsight process optimization software, the new 10 kW Ascent SMS AP power supply enables our customers to achieve the highest possible levels of precision, repeatability and yield in advanced semiconductor processes.”

The new unit is the first AE power supply to embed PowerInsight process characterization and optimization software. Simplifying the collection, analysis and translation of data from critical power delivery systems, PowerInsight provides actionable intelligence that can be applied to optimize processes for improved throughput and yield, as well as reduce unplanned downtime of process equipment. With PowerInsight, Advanced Energy's pulsed DC power supplies minimize arcing while enhancing deposition rate, film morphology and film properties.

For detailed product information and technical specifications, visit www.advancedenergy.com/products/plasma-power-generators/pulse-dc-systems/ascent-ap-series.

The 10 kW Ascent SMS AP power supply will be showcased at [AE's booth 834](#) at SEMICON West 2021, which takes place December 7-9 at the Moscone Center in San Francisco, CA.

About Advanced Energy

Advanced Energy (Nasdaq:AEIS) is a global leader in the design and manufacturing of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. AE's power solutions enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing and healthcare. With engineering know-how and responsive service and support around the globe, the company builds collaborative partnerships to meet technology advances, propel growth for its customers and innovate the future of power. Advanced Energy has devoted four decades to perfecting power for its global customers and is headquartered in Denver, Colorado, USA. For more information, visit www.advancedenergy.com.

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