Advanced Energy Introduces Innovative, Five-Output Power Supply for Solar PV Manufacturing Industry

Aug 06, 2020 8:00 PM

Ascent MS optimizes power delivery and lowers costs for crystalline silicon PECVD processes in the production of solar cells

DENVER--(BUSINESS WIRE)-- Advanced Energy (Nasdaq: AEIS) – a global leader in highly engineered, precision power conversion, measurement and control solutions – today introduces its new industry-leading Ascent[®] MS multi-output power supply system. Designed to enable the lowest system and infrastructure costs in the industry for solar photovoltaic (PV) plasma-enhanced chemical vapor deposition (PECVD) systems, the Ascent MS builds on Advanced Energy's long legacy of bringing power system innovation to the manufacturing of advanced solar cells.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20200806005874/en/

Advanced Energy introduces innovative, five-output power supply. Ascent MS optimizes power delivery and lowers costs for crystalline silicon PECVD processes in the production of solar cells. (Photo: Business Wire)

The Ascent MS supports up to five independent chambers of passivated emitter and rear contact (PERC) PECVD processes

in a single unit, optimizing power delivery and simplifying the deposition system design. The power system's quick-connect power outputs, single point of control and minimized need for water and input power connections make for an optimized coater infrastructure. This enables faster coater installation, higher manufacturing line reliability and lower cost per coater. By supporting multiple tubes, the Ascent MS allows solar PV equipment manufacturers to develop more cost-effective systems that require less electrical and mechanical infrastructure than existing solutions.

"The manufacturing of PERC solar cells is an exceptionally competitive market," said Dave McAninch, director of strategic marketing, Advanced Energy. "Our Ascent MS takes the economics of power delivery to a new level by delivering a system-level solution designed specifically for today's market needs."

PERC has become the dominant solar cell technology shipped in the past few years and has driven down the levelized cost of energy (LCOE) significantly. By providing the industry with system solutions that continue to deliver better economics to the market, Advanced Energy has long been a leader in the solar PV manufacturing equipment market and is well-positioned to meet the evolving technology demands of the solar cell market, including heterojunction with intrinsic thin-layer technology (HIT), with a broad portfolio of market-leading solutions, including RF, AC, DC and remote plasma source technologies.

Features of the Ascent MS include:

- Up to five outputs per power system
- 15kW, 20kW, 30kW models to meet the evolution in PERC technology and manufacturing
- Single point of communication, water, I/O and AC power input for all five power outputs

- Independent ON/OFF times, arc parameters and setpoints for each output
- Modular power connectors for rapid installation

For detailed technical specifications, visit https://www.advancedenergy.com/products/plasma-power-generators/low-mid-frequency-power-systems/ascent-ms/.

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 knowhow 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 more than three decades to perfecting power for its global customers and is headquartered in Denver, Colorado, USA. For more information, visit www.advancedenergy.com.

Advanced Energy | Precision. Power. Performance.

View source version on businesswire.com: https://www.businesswire.com/news/home/20200806005874/en/

Lora Wilson Global Results Communications for Advanced Energy Industries, Inc. aei@globalresultspr.com +1 949.306.0276

Source: Advanced Energy