Advanced Energy

INTRODUCING ASCENT® AMS WITH 5 KHZ PULSING

COUPLING ARC PREVENTION WITH ARC HANDLING TO ECONOMICALLY ENHANCE YOUR CHALLENGING CONDUCTIVE FILMS, WHILE PROVIDING SYSTEM EXTENDABILITY INTO NEW PROCESSES

AE®, the original innovators of pulsing technology for arc prevention nearly 20 years ago, introduces an embedded 5 kHz output in our flagship Ascent® AMS platform. This capability can improve the film quality of those demanding conductive oxides, while maintaining the platform's renowned power stability and repeatability—without loss of deposition rate.

Features

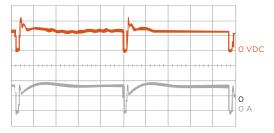
- 5 kHz (120 A) and 2 kHz (150 A) output—optimized for difficult conductive films
- Arc Management System™
 (AMS) technology—customer
 pre-sets for metal and ceramic
 targets
- > Set Point Compensation™ technology—stable throughput

Benefits

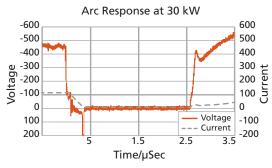
- High film quality and throughput
- Reduced film, substrate, and equipment damage
- Stable throughput and power delivery under extreme arcing conditions
- > Easy integration and control



Periodic voltage reversal neutralizes charge buildup and proactively inhibits arcs—eliminating most even before they form.



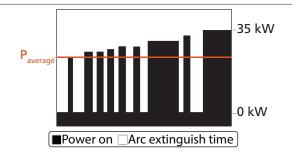
5 kHz pulsing with 10 usec shutdown



Leading-edge arc detection, shutdown, and recovery speed minimize film or equipment damage.

The combination of proprietary Arc Management System™ (AMS) and Set Point Compensation™ technologies minimizes film and equipment damage and maintains stable throughput.

Set Point Compensation $^{\text{\tiny{M}}}$ technology improves power-delivery repeatability and maintains sputter rate by automatically adjusting power output to compensate for arc shutdowns.



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