Advanced Energy Expands High Accuracy Temperature Monitoring Portfolio with New Luxtron® FluorOptic® Sensing Platform

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New sensing platform with RubiLux™ and VioLux™ phosphor formulations enable precise, repeatable measurement across an extended temperature range

DENVER--(BUSINESS WIRE)-- Advanced Energy Industries, Inc. (Nasdaq: AEIS) – a global leader in highly engineered, precision power conversion, measurement and control solutions – has expanded its Luxtron® family of FluorOptic® Thermometry (FOT) solutions with a new converter platform and two proprietary phosphor formulations. The Luxtron M-1000 converter with Rubilux™ and VioLux™ phosphor formulations enable high accuracy temperature measurement over an expanded temperature range for the most advanced semiconductor etch and deposition processes.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20220711005264/en/

Advanced Energy Expands High Accuracy Temperature Monitoring Portfolio with New Luxtron® FluorOptic® Sensing Platform (Photo: Business Wire)

Featuring a new light source and improved low noise photodetection, the Luxtron M-1000 provides dual channel capability with accuracy variations as low as ± 0.2°C, stability above 0.05°C and the industry's broadest operating range from -200 to 450°C. The converter is optimized to work with both phosphor formulations to accommodate the full temperature range.

"Wafer temperature is a critical process parameter for advanced High Aspect Ratio (HAR) etching used to create semiconductor devices such as 3D NAND," said Jeff Hebb, vice president of strategic marketing and applications, critical sensing and control at Advanced Energy. "To optimize HAR etch processes, semiconductor manufacturers at the leading edge are increasingly moving towards a wider range of operating temperatures ranging from cryogenic to hot chuck. By delivering precise, repeatable measurement across a wide temperature range, the M-1000 converter and new phosphor formulations enable the full range of temperature measurement required for high-volume manufacturing of HAR processes."

For decades, Advanced Energy's Luxtron FOT sensing technology has been leading the industry with high temperature accuracy and wide operating range. The Luxtron FOT sensing system combines a phosphor-coated fiber optic probe with a high-performance converter that integrates an advanced light source, a photodetector proprietary software algorithm and low-noise amplification circuitry. Because measurement is based on optical sensing, Luxtron FOT systems offer more accuracy than conventional electrical sensors in processes involving strong electromagnetic fields, including plasma etch and deposition, MRI systems and power transformers.

For detailed product information and technical specifications, visit our website.

The Luxtron M-1000 will be showcased at AE's booth 844 at SEMICON West 2022, which takes place July 12–14 at the Moscone Center in San Francisco, CA. Learn more: www.advancedenergy.com/semiconwest.

About Advanced Energy

Advanced Energy Industries, Inc. (Nasdaq: AEIS) is a global leader in the design and manufacture of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. Advanced Energy'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 for customers around the globe, the company builds collaborative partnerships to meet technology advances, propels growth of its customers and innovates the future of power. Advanced Energy has devoted four decades to perfecting power. It is headquartered in Denver, Colorado, USA.

For more information, visit www.advancedenergy.com.

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