

# TREK ESD ON-BOARD CONTROLLERS (OBC)

Custom on-board controllers for electrostatic monitors.



Trek® manufactures and supplies electrostatic measurement instruments for ESD applications, including custom on-board controllers. Accurate measurements are important for identifying sources of charge generation, and for verifying the effectiveness of ESD countermeasures that are employed in ESD control programs.

The low-profile PC board design makes them ideal for continuous monitoring of electrostatic voltage in automated processes. A precision voltage divider output provides a low-voltage replica of the measured electrostatic voltage for interface to a facilities monitoring system.

Trek electrostatic monitors accomplish voltage measurements without physical contact to the measure surface by making use of a chopper stabilized, field-nulling technique which maintains DC stability and high accuracy over wide probe-to-surface variations. This technique assures no loading of the voltage and permits accurate measurements without the need to establish a fixed probe spacing.

## PRODUCT HIGHLIGHTS

- Customer specified voltage monitor output ratios
- Customer specified probe-to-surface separations
- Customer specified PC board size/configuration
- Customized probe mounting fixtures

## AT A GLANCE

### Measurement Range

To  $\pm 1.2$  kVDC or peak AC

### Speed of Response

To less than 5 ms for a 1 kV step change

### DC Accuracy

To better than  $\pm 1\%$  of full scale

### Spatial Resolutions

To less than 8 mm



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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

AE's power solutions enable customer innovation in complex semiconductor and industrial thin film plasma manufacturing processes, demanding high and low voltage applications, and temperature-critical thermal processes.

With deep applications know-how and responsive service and support across the globe, AE builds collaborative partnerships to meet rapid technological developments, propel growth for its customers and power the future of technology.

PRECISION | POWER | PERFORMANCE

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