

E3310

Multi Vision Metrology SEM supports next-generation wafers



The E3310 is a WAFER MVM-SEM* for next generation wafers, supporting 1Xnm node process development and volume production at the 22nm node and beyond. With its high-speed carrier system employing a dual arm vacuum robot, and low-vibration platform to improve measurement accuracy, the E3310 delivers high throughput and performance for wafer measurements. Its multi detector configuration and unique 3D measurement algorithm also enable stable, high-accuracy measurement of 3D transistor technologies such as FinFET. The E3310 makes a significant contribution to reducing process development turnaround time and improves productivity for next-generation devices.

*Multi Vision Metrology Scanning Electron Microscope

Support for diverse wafer types

- Silicon wafer
- AlTiC wafer
- Ouartz wafer
- Silicon carbide wafer

Wafer size supported: 150mm - 300mm (depends on wafer type)

Advanced electron-optical column design

The E3310 inherits the proprietary column design and unique electron beam scanning technology employed by the E3630, which has a large installed base in the photomask sector. Advantest's unique architecture achieves high resolution by maintaining a high voltage inside the column, and a newly developed object lens significantly reduces chromatic aberration and further improves resolution in the low acceleration range.

Accurate, high-precision positioning technology

A new stage positioning system, charge control function, and contamination reduction technology enable the stable positioning of objects for measurement even at high SEM magnification, allowing high throughput and easy observation.

Supports evolving wafer processes

The E3310's multi-detector configuration allows it to achieve stable, highly accurate measurements at the 1Xnm node. It also features a proprietary detection algorithm, enabling measurement of 3D FinFET architectures, and contributes to reducing process development turnaround time by providing new process control information.

Rich range of applications

- Large field-of-view SEM image enables automatic multipoint measurement function
- · Pattern contour detection/GDS output function from SEM image
- Displays 3D images generated by multi-detector system
- SECS/GEM function for factory automation

MVM-SEM is either a registered trademark or a trademark of Advantest Corporation in Japan, the United States and other countries.



Please refer to product manual for complete system specifications. Specifications may change without notification.



https://www.advantest.com/

Enquiries about this system should be directed to:

Nanotechnology Business Group

1-5, Shin-tone, Kazo-shi, Saitama 349-1158 Saitama R&D Center

Phone: +81-480-72-6300

E-mail: PDL-AT-info_nano@advantest.com

ADVANTEST CORPORATION

Shin-Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan Phone: +81-3-3214-7500 Fax: +81-3-3214-7705

Advantest America, Inc.

3061 Zanker Rd., San Jose, CA 95134, U.S.A. Phone: +1-408-456-3600 Fax: +1-408-456-5174

Advantest Europe GmbH

Stefan-George-Ring 2, 81929 Munich, Germany Phone: +49-89-993-12-0 Fax: +49-89-993-12-101

Advantest (Singapore) Pte. Ltd.

1 Yishun Avenue 7 Singapore 768923 Phone: +65-6755-2033 Fax: +65-6754-3946

Advantest Taiwan Inc.

No.15, Guangfu Rd., Hsinchu Industrial Park, Hukou Township, Hsinchu County 30351, Taiwan (R.O.C.) Phone: +886-3-597-5888 Fax: +886-3-598-1133

Advantest Korea Co., Ltd.

140, 3 Gongdan 6-ro, Seobuk-gu, Cheonan-City, Chungnam, Pro 331-200, Korea Phone: +82-41-901-3900

Advantest (China) Co., Ltd

C Block,Bldg.3, 168 HuaTuo Road Zhangjiang Hi-Tech Park, Shanghai, 201203 China (P.R.C.) Phone: +86-21-6163-2600

Fax: +86-21-2028-7600