

Semiconductor fabs and OEMs worldwide value the accuracy, precision and versatility of the WaferSense ATS2 – The most efficient and effective wireless measurement device for wafer handoff teaching.

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# WaferSense®

## Auto Teaching System<sup>™</sup> (ATS2)

## Metrology Sensors

#### Speed achieving accurate wafer hand-off calibration, proper alignment and set-ups.

"Sees" inside semiconductor equipment to capture three dimensional offset data (x, y and z) to quickly teach wafer transfer positions with accuracy to 100μm.

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## WaferSense<sup>®</sup> Auto Teaching System<sup>™</sup> (ATS2)

#### Improve Yields

Improve yields and lower particulate contamination with accurate wafer handoff calibration.

- Capture offset data for accurate calibration of transfer positions as the wafer-like ATS2 moves through your semi-conductor equipment.
- Improve the yield of your manufacturing process with calibrated equipment.

## Repeatable & Reproducible

Achieve repeatable and reproducible semiconductor equipment setups.

 Eliminate technician-to-technician variation with the ATS2 calibration process enabling repeatable and reproducible setup and maintenance checks.

#### Specifications Wireless, wafer-shaped Available in 200mm and 300mm and battery-powered 200 mm (8030276), 300 mm (8030275), Part Numbers 300 mm with Quartz Ring (8030423) Reports x-y-z offset from the teaching wafer to a target inside the equipment so you can teach wafer transfer Two on-board cameras coordinates. Cameras: 1 upward, 1 downward. Color images with white light illumination. Software NordsonSpectrum **Durable housing** Chemically hardened glass (CHG) Lightweight, wafer-like 165 grams ± 25 grams (200 mm), mass and mass 225 grams ± 25 grams (300 mm) distribution Sensor edge and body Edge: 0.80 mm: Body: 3.5 mm thickness (300mm) <10-6 to 760 torr Operating pressure Operating temperature 20 to 60 °C Bluetooth, WiFi Communication Operating system Windows 10 Teaching device, charging clean Product components case, carrying suitcase, accessory communication gateway Factory recalibration Calibration recommended annually Battery-duration >2 hrs. per charge Working distance 6.5 mm to 45 mm Nominal working 10 mm (downward), distance 12mm (upward) Measurement 0.025 mm for X and Y position Repeatability at nominal focus distance<sup>1</sup> 0.05 mm for X and Y position

Reduce Equipment Downtime

Equipment Downtime from hours to minutes.

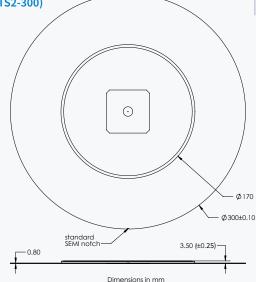
- Save time troubleshooting with the wireless and vacuum compatible ATS2, as equipment stays sealed during inspection.
- Increase equipment availability and reduce manpower and consumable expense.

### Speed Trouble-shooting

Speed trouble-shooting and lower consumable expense with visual inspection.

- Receive real-time images as robots move the ATS2 through the tool. New CyberSpectrum<sup>™</sup> software graphical user interface provides
- x, y and z offsets that eliminate guesswork.
   Search for lost wafers, verify that pedestals are free of debris without opening the tool.

#### Dimensions (ATS2-300)





Real-time data.

For more information, speak with your Nordson representative or contact your Nordson regional office

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#### NordsonSpectrum Software

Displays real-time video and measurements of target features, logs offsets and user comments. Allows teaching of circular, square and crossed features. Review functionality integrated; replays log file data for review and analysis.



 Accuracy
 at nominal focus distance<sup>2</sup>

 1) Measured on test artifact under identical conditions. 2) Measured on test artifact in atmospheric pressure room temp

www.nordson.com/TestInspect

DS-ATS-170125

Accuracy