WaferSense®

Auto Teaching System™ (ATS2)

○— **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 50μm.

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 semiconductor equipment.
- Improve the yield of your manufacturing process with properly calibrated equipment.

Achieve repeatable and reproducible semiconductor equipment setups.
- Eliminate technician-to-technician variation with the ATS2 calibration enables repeatable and reproducible setup and maintenance checks.

Reduce equipment downtime from hours to minutes.
- Save time troubleshooting as the wireless and vacuum compatible ATS2 allows equipment to remain sealed during inspection.
- Increase equipment availability while reducing manpower and consumable expense.

Speed troubleshooting and lower consumable expense with visual inspection.
- Receive real-time images as robots move ATS2 through the tool. New CyberSpectrum™ software graphical user interface provides x, y and z offsets that eliminate guesswork.
- Search for lost wafers and pedestal debris without opening the tool.

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.
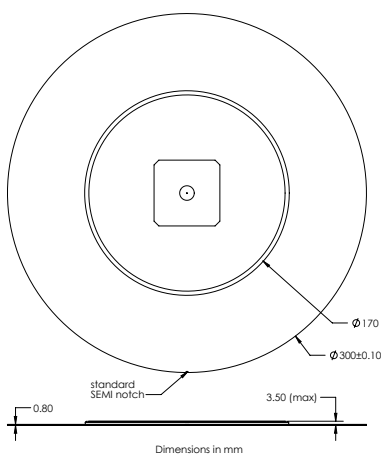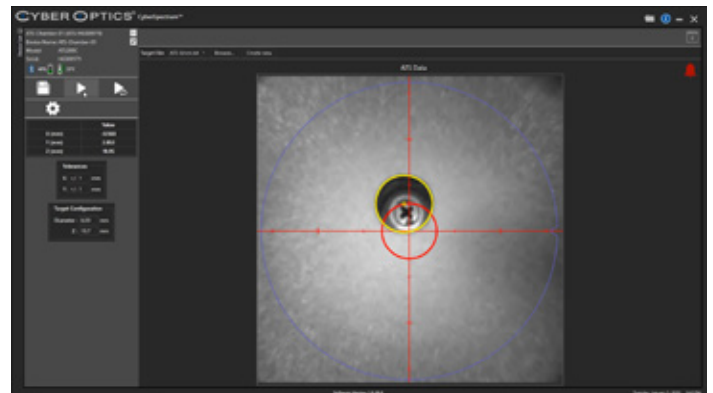
Save Time. Save Expense. Improve Yields.

Nordson
TEST & INSPECTION

CYBEROPTICS®

Features

Wireless, wafer-shaped and battery-powered	Available in 200 mm and 300 mm
Part numbers	200 mm (8030276), 300 mm (8030275), 300 mm with Quartz Ring (8030423)
Two on-board cameras	Reports x-y-z offset from the teaching wafer to a target inside the equipment so you can teach wafer transfer coordinates. Cameras: 1 upward, 1 downward. Color images with white light illumination.
Easy-to-use software	CyberSpectrum software included
	CyberSpectrum: 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.
Durable housing	Chemically hardened glass (CHG)
Lightweight, wafer-like mass and mass distribution	≈185 grams (200 mm), 225 grams ± 25 grams (300 mm)
Sensor edge and body thickness	Edge: 0.80 mm; Body: 3.5 mm
Operating pressure	$<10^{-6}$ to 760 torr
Operating temperature	20 to 60 degrees C
Wireless communications mode	Bluetooth, WiFi
Operating systems	Windows 7, 10
Product components	Teaching device, charging clean case, carrying suitcase, accessory communication gateway
Calibration	Factory recalibration recommended annually
Battery-operation	>2 hrs. per charge
Working distance	6.5 mm to 45 mm
Optimum working distance (best focus - downward)	11.0 mm
Measurement Repeatability	0.075 mm for X and Y position at nominal focus distance*
Accuracy	0.05 mm for X and Y position at nominal focus distance*

*Measured on test artifact under identical conditions

Dimensions (ATS2-300)

Ø170
Ø300±0.10
standard SEMI notch
0.80
3.50 (max)
Dimensions in mm

CyberSpectrum™

Real-time data.