

WaferSense® Auto Teaching System (ATS)

ATS

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 100um.



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

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

Achieve repeatable and reproducible semiconductor equipment setups.

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

Reduce equipment downtime from hours to minutes.

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

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

- Receive real-time images as robots move ATS through the tool. An intuitive graphical user interface provides x, y and z offsets that eliminate guesswork.
- Search for lost wafers and verify that pedestals are free of debris without opening the tool.

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



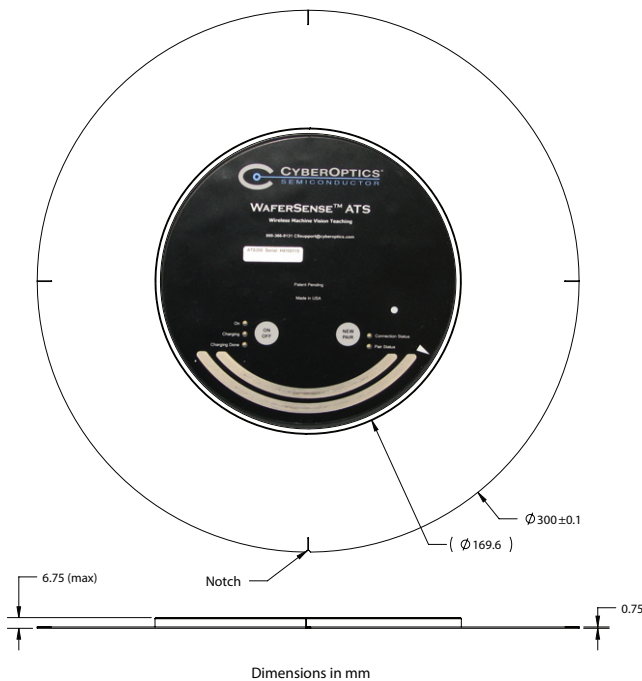
Save Time. Save Expense. Improve Yields.

CYBEROPTICS®

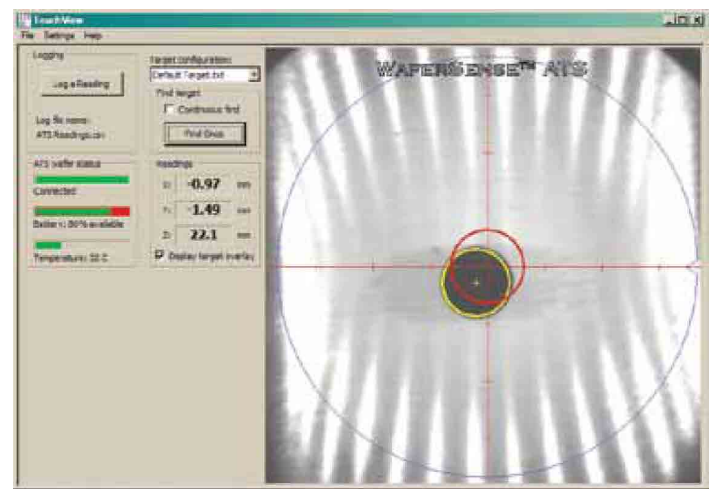
Features

Wireless, wafer-shaped and battery-powered	Available in 200mm and 300mm
On-board camera	Reports x-y-z offset from the teaching wafer to a target inside the equipment so you can teach wafer transfer coordinates
Easy-to-use software	TeachView, TeachReview and TeachTarget software included TeachView: Displays real-time video and measurements of target features, logs offsets and user comments TeachReview: Replays log file data for review and analysis Teach Target: Allows teaching of circular features, 3mm-10mm diameter
Highly accurate	+/- 0.1mm (X and Y position): +/- 0.8mm (z position)
Durable housing	Carbon fiber composite
Lightweight	160 grams (200mm), 235 grams (300mm)
Working distance	6.5mm to 45mm below the teaching wafer
Operating pressure	<10e ⁻⁶ to 760 torr
Operating temperature	20 to 50 degrees C
Battery-operation	>2 hrs. per charge
WaferSense Link	Bluetooth, 2.4 GHz, USB 1.1, dimensions 92mm x 58mm x 28mm
Operating Systems	Windows 7, XP and Vista
Product components	Teaching device, charging clean case, carrying suitcase, USB communications link module and application software
Calibration	Factory recalibration recommended annually
Options	ATS300-R – Quartz Centering Ring Option, tool-specific calibration targets

Dimensions (ATS300C)



TeachView™



Real-time data.



Contact CyberOptics today for your complimentary on-tool demonstration
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