

# 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.**



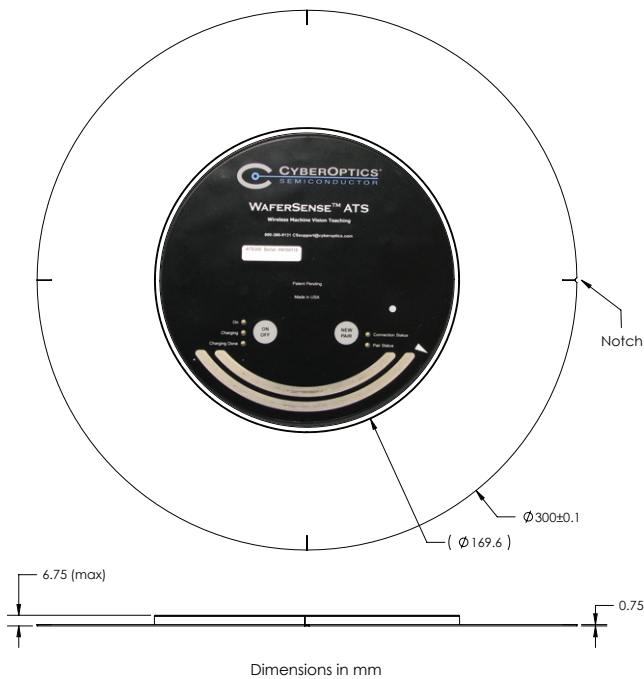
**Save Time. Save Expense. Improve Yields.**

**CYBEROPTICS®**

# Features

<b>Wireless, wafer-shaped and battery-powered</b>	Available in 200mm and 300mm
<b>On-board camera</b>	Reports x-y-z offset from the teaching wafer to a target inside the equipment so you can teach wafer transfer coordinates
<b>Easy-to-use software</b>	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
<b>Highly accurate</b>	+/- 0.1mm (X and Y position): +/- 0.8mm (z position)
<b>Durable housing</b>	Carbon fiber composite
<b>Lightweight</b>	160 grams (200mm), 235 grams (300mm)
<b>Working distance</b>	6.5mm to 45mm below the teaching wafer
<b>Operating pressure</b>	<10e <sup>-6</sup> to 760 torr
<b>Operating temperature</b>	20 to 50 degrees C
<b>Battery-operation</b>	>2 hrs. per charge
<b>WaferSense Link</b>	Bluetooth, 2.4 GHz, USB 1.1, dimensions 92mm x 58mm x 28mm
<b>Operating Systems</b>	Windows 7, XP and Vista
<b>Product components</b>	Teaching device, charging clean case, carrying suitcase, USB communications link module and application software
<b>Calibration</b>	Factory recalibration recommended annually
<b>Options</b>	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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