# ReticleSense®

Auto Teaching System<sup>™</sup> (ATSR)

 Speed achieving accurate reticle placement calibration, proper alignment and set-ups.

"Sees" inside semiconductor equipment to capture three dimensional offset data (x, y and z) to quickly teach reticle transfer positions with accuracy to 50µm.



# Improve yields and lower particulate contamination with accurate reticle handoff calibration.

- Capture offset data for accurate calibration of transfer positions as the reticle-like ATSR 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 ATSR 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 ATSR 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 ATSR 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 ReticleSense ATSR – The most efficient and effective wireless measurement device for reticle placement and alignment.







Save Time. Save Expense. Improve Yields.

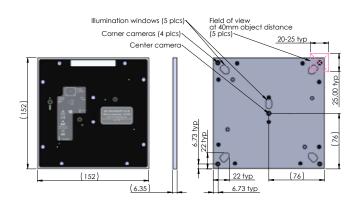


## **Features**

Wireless, reticle-shaped and battery-powered	Available in 6" reticle shaped form factor
Part number	8028974
On-board camera	Reports x-y-z offset from teaching to edges inside the equipment so you can teach reticle transfer coordinates with 5 cameras. 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. Review functionality integrated; replays log file data for review and analysis.
Durable housing	Reticle quartz housing compatible with most all mask equipment and scanners.
Lightweight, reticle-like mass and mass distribution	230 gms ±10%
Body thickness	Body: 6.35 mm; standard 6" reticle format.
Operating pressure	<10 <sup>-6</sup> to 760 torr
Operating temperature	20 to 60 degrees C
Wireless communications mode	Bluetooth
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	38 mm to 42 mm
Measurement Repeatability	0.025 mm at nominal focus*
Accuracy	0.050 mm at nominal focus*

<sup>\*</sup>Measurement depends on the target edge details

## **Dimensions** (mm)



# $\textbf{CyberSpectrum}^{\text{TM}}$



Real-time data.

