

WaferSense® Auto Leveling System 2 Vertical (ALS2V)

ALS2V

- **Speeds setting the right inclination by measuring pitch, roll, rise overrun and vertical inclinations.**

Quickly and accurately set the same level across tools for better process uniformity.



Optimize equipment setup.

- › Measure the inclination of cassettes, FOUPs, end effectors, aligner, load locks, transfer pins and process chamber pedestals to fully characterize your production equipment.
- › Keep process areas unexposed to the fab environment with the wafer-like and vacuum compatible ALS2V.

Enhance process uniformity with objective and reproducible level adjustments.

- › Take the human element out of adjusting your equipment with objective numerical measurements.
- › Easily and quickly review and store measurements with CyberSpectrum™ software graphical user interface.
- › Make the right adjustments time after time.
- › Attain better tool-to-tool process uniformity with leveling that is repeatable, technician-to-technician.
- › Easily detect warped deposition rings and tilted furnace boats with horizontal inclination measurements.
- › Enhance Ion Implant process control with vertical inclination measurements.

Reduce equipment maintenance time with wireless measurement.

- › Collect and display inclination data wirelessly.
- › See the effects of your adjustments in real time, speeding equipment alignment and returning it to productive use faster.

Reduce particles and increase yield with improved equipment set-up.

- › Enable reliable and smooth wafer transfers by ensuring wafer cassettes, boats and FOUPs are parallel with robots.
- › Minimize particle generation by ensuring transfer pins are parallel with pedestals and end effectors.
- › Optimize plating and implantation processes with accurate inclination.

Semiconductor fabs and OEMs worldwide value the accuracy, precision and versatility of the WaferSense ALS2V– The most efficient and effective wireless measurement device for leveling.



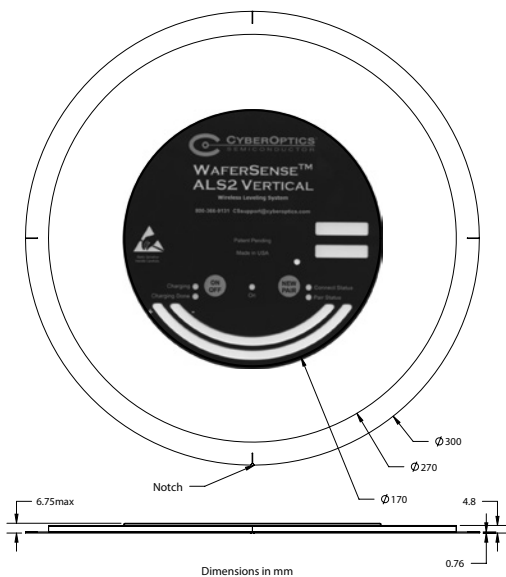
Save Time. Save Expense. Improve Yields.

CYBEROPTICS®

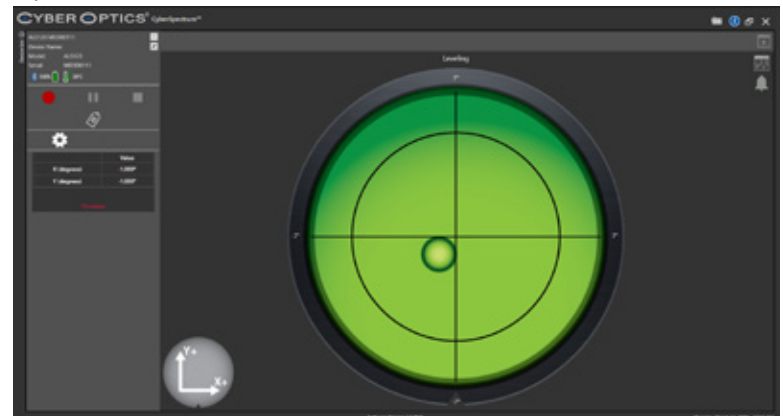
Features

Wireless, wafer-shaped and battery-powered	ALS2(C): Standard, ALS2(CL): Light, ALS2(V): Vertical
Part Numbers	ALS2300C, ALS2V300C, ALS2300CL, ALS2V300CL, ALS2200C, ALS2V200C
Easy-to-use software	CyberSpectrum software included CyberSpectrum: Displays real-time visual feedback. Digital readout allows more precise adjustment. View log file data for review and analysis.
Highly accurate	Horizontal accuracy : ± 0.03 deg within ± 7 deg from absolute. Vertical accuracy: ± 0.05 deg within ± 50 deg from vertical Horizontal resolution: ± 0.002 deg within ± 14 deg Vertical resolution: ± 0.01 deg within ± 50 deg
Reports inclination in two dimensions	Pitch and roll display allows quick, accurate adjustments. Slope and polar display modes enhance ease-of-use.
Relative measurements	Zero position may be set to any reference plane within the system's operating range for easy relative measurements
Durable housing	Carbon fiber composite
Lightweight	150 grams (200mm), 200 grams (300mm CL), 240 grams (300mm C)
Operating pressure	$<10^{-6}$ to 760 torr
Operating temperature	20 to 70 degrees C
Battery-operation	>4 hrs. per charge, 8 hrs. typical
WaferSense Link	Bluetooth, 2.4 GHz, USB 1.1, dimensions 92mm x 58mm x 28mm
Operating Systems	Windows 7, 8, 10, or 11
Product components	Leveling measurement device, charging clean box, carrying suitcase, USB communications link module and application software
Calibration	Factory recalibration recommended annually

Dimensions (ALS2V300C)



CyberSpectrum™



Real-time data.

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Contact CyberOptics today for your complimentary on-tool demonstration
+1 800.366.9131 or +1 763.542.5000 | CSsales@cyberoptics.com | www.cyberoptics.com

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