WaferSense™
Auto Vibration System (AVS)

AVS

Speed monitoring 3-axis acceleration and vibration, enabling yield improvements

Records vibration data for easy comparison between past and present, as well as one tool to another, to reduce particles, maintenance time and cycle time.

Speed equipment qualification with wireless measurements.
- Collect and display acceleration data wirelessly using the AVS and VibeView™ software for real-time equipment diagnostics.
- See the effects of adjustments in real time, speeding equipment alignment and setup.

Shorten equipment maintenance cycles with wafer-like accelerometer.
- Observe and optimize wafer, cassette, SMIF and FOUP motions using the AVS three-axis accelerometer.
- Detect wafer slides, slips, bumps, scrapes and rough handling in real-time with the vacuum compatible AVS, without opening the tool.
- Optimize motion parameters once the location or absence of wafer damage is identified.

Lower equipment expenses with objective and reproducible data.
- Establish a baseline from known clean tool, then cycle AVS through like a dummy wafer to verify that baseline operation continues.
- Receive early warning for impending equipment failures and optimize your preventative maintenance plans.

Optimize equipment productivity and yield by maximizing acceleration and minimizing vibration.
- Optimized motion profiles and trajectories minimize cycle times and smooth, vibration free handling minimizes particle adders.

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

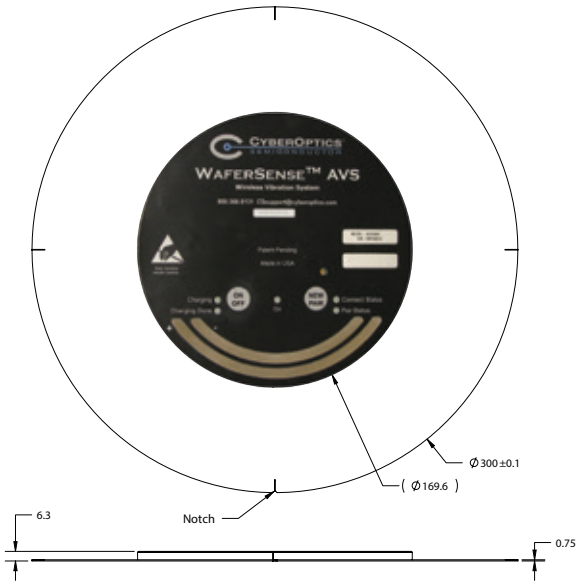
Save Time. Save Expense. Improve Yields.

CYBEROPTICS®

Features

Wireless, wafer-shaped and battery-powered	Available in 200mm, 300mm and 450mm
Easy-to-use software	VibeView and VibeReview software included
	VibeView: Displays real-time visual feedback and can record data in a log file
	ViewReview: Replays log file data for review and analysis
Highly accurate	Reports accelerations in three directions; x,y and z and RMS display allows quick, objective measurements
	Resolution: +/- 0.01 G
Durable housing	Carbon fiber composite
Lightweight	150 grams (200mm), 240 grams (300mm), 600 grams (450mm)
Operating range	+/- 2G
Operating pressure	$<10e^{-6}$ 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, XP and Vista
Product components	Vibration measurement device, charging clean case, carrying suitcase, USB communications link module and application software
Calibration	Factory recalibration recommended annually

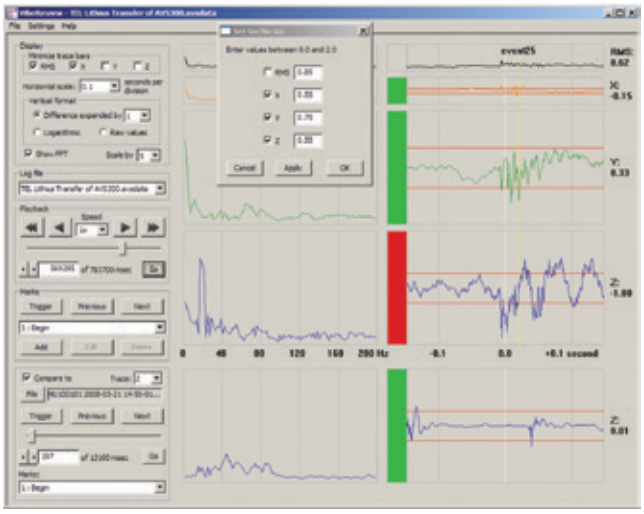
Dimensions (AVS300CL)



Dimensions in mm

Visit www.cyberoptics.com for drawings of other form factors.

VibeReview™



Real-time data.