

WaferSense® Airborne Particle Sensor (APS)

○ Improve equipment set-up and yields by wirelessly monitoring airborne particles in real-time.



Quickly monitors, identifies and enables troubleshooting of airborne particles down to 0.15µm within semiconductor process equipment and automated material handling systems. Easily identifies when and where the particles originate.

Speed equipment qualification with wireless measurements.

- Collect and display particle data wirelessly using the APS and ParticleSpectrum™ software for real-time equipment diagnostics.
- Compare past and present as well as one tool to another easier and faster without opening an additional application, now with ParticleReview™ functionality integrated with ParticleSpectrum™.
- Save time by swiftly locating contamination sources and see the effect of cleanings, adjustments and repairs in real time.

Shorten equipment maintenance cycles with wafer-like form factor.

- Detect particles in real-time without opening the tool, so you don't need to expose process areas to the environment.
- APS goes where wafers go to find the place where particles contaminate wafers. Once the location of particles is identified, tools may be selectively cleaned. Open only the dirty portion, keep the clean areas clean.

Lower equipment expenses with objective and reproducible data.

- Raise your first-pass monitor wafer success, reduce your qualification expense and increase availability with APS.
- Receive early warning for impending equipment failures and optimize your preventative maintenance plans.
- Establish a baseline from a known clean tool, then cycle APS through a candidate tool before committing monitor wafers.

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

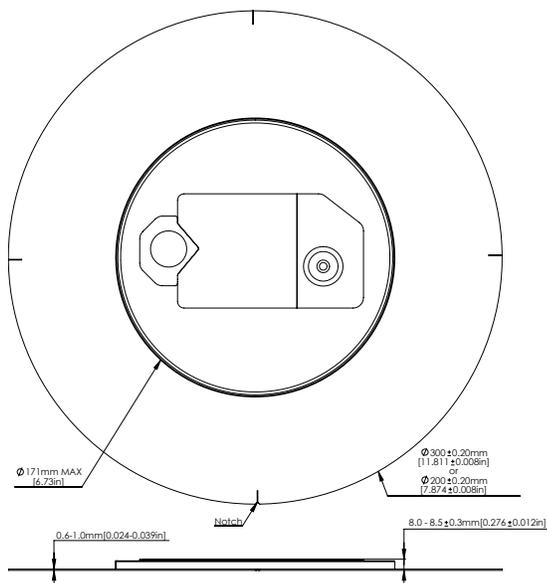


Save Time. Save Expense. Improve Yields.

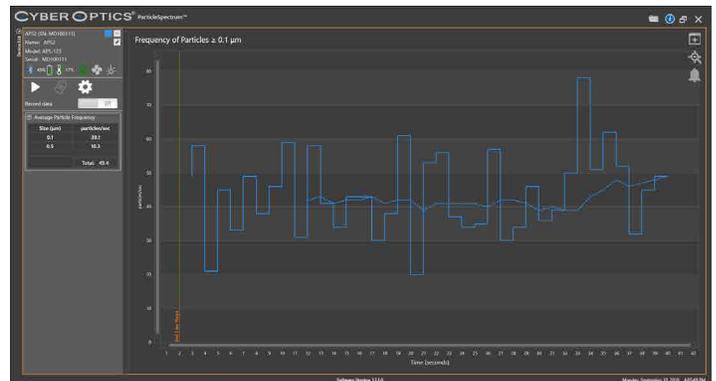
Features

Wireless, wafer-shaped and battery-powered	Available in 200mm and 300mm
Easy-to-use software	ParticleSpectrum software included ParticleSpectrum: Displays real-time numeric and visual feedback, cumulative or differential counting modes and particle frequency. Review functionality integrated; replays log file data for review and analysis
Highly accurate	Measures particles greater than 0.15µm Size channels: Reports particles in 0.1µm and 0.5µm bin sizes
Durable housing	Carbon fiber composite
Lightweight	200 grams (200mm), 270 grams (300mm)
Airflow	0.1CFM (2.8L/m) @ 1 atmosphere
Operating pressure	0.4 to 1.6 atmosphere
Operating internal temperature	15 deg C to 45 deg C non-condensing
Battery-operation	>1 hour per charge
WaferSense Link	Bluetooth, 2.4 GHz, USB 1.1
Operating Systems	Windows 7, XP and Vista
Product components	Particle measurement device, charging clean case, carrying suitcase, USB communications link module and application software
Calibration	Factory recalibration recommended annually
Laser	The APS is a Class 1 laser product employing an embedded Class 3B laser whose radiation is fully enclosed and not exposed to the user.

Dimensions (APS300C)



ParticleSpectrum™



Real-time data.



Contact CyberOptics today for your complimentary on-tool demonstration
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