

# 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 Particle View™ software for real-time equipment diagnostics.
- Compare past to present as well as one tool to another with recorded particle data.
- 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.**

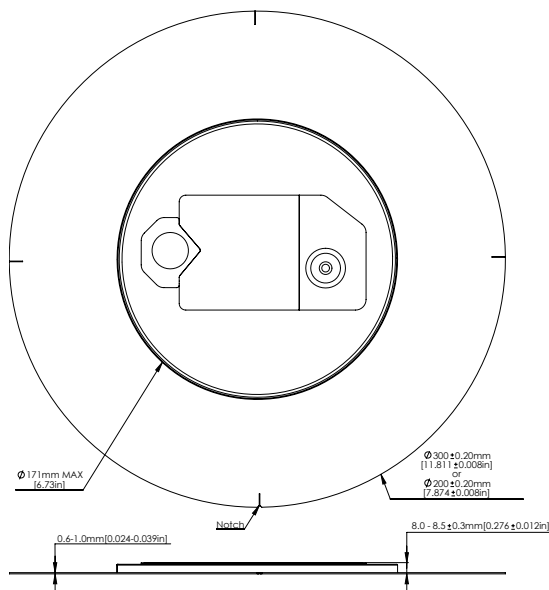


**Save Time. Save Expense. Improve Yields.**

# Features

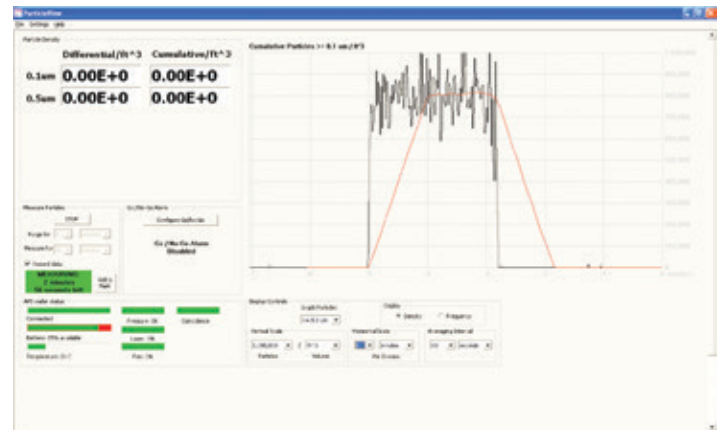
<b>Wireless, wafer-shaped and battery-powered</b>	Available in 150mm (new), 200mm and 300mm
<b>Easy-to-use software</b>	ParticleView and ParticleReview software included ParticleView: Displays real-time numeric and visual feedback, cumulative or differential counting modes and density or frequency modes ParticleReview: Replays log file data for review and analysis
<b>Highly accurate</b>	Measures particles greater than 0.15µm Size channels: Reports particles in 0.1µm and 0.5µm bin sizes
<b>Durable housing</b>	Carbon fiber composite
<b>Lightweight</b>	200 grams (200mm), 270 grams (300mm)
<b>Airflow</b>	0.1CFM (2.8L/m) @ 1 atmosphere
<b>Operating pressure</b>	0.4 to 1.6 atmosphere
<b>Operating internal temperature</b>	15 deg C to 45 deg C non-condensing
<b>Battery-operation</b>	>1 hour 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>	Particle measurement device, charging clean case, carrying suitcase, USB communications link module and application software
<b>Calibration</b>	Factory recalibration recommended annually
<b>Laser</b>	The APS2 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)



Visit [www.cyberoptics.com](http://www.cyberoptics.com) for drawings of other form factors.

## ParticleView™



Real-time data.