

New AirSens

Airborne Particle Sensor



The AirSens is a proven technology adopted in Semiconductor manufacturing processes for many years to identify the source, reducing particulate contamination and increasing yields.

Incorporating the AirSens into your yield management processes will increase yield and minimize yield management costs by the early detection and identification of particle generation events leading to alternatives for contamination control. Knowing the type of particle and its source will lead to better contamination control management.

In more traditional monitoring systems aerosol manifolds with extremely long sampling tubes are currently in use. Over time it has been proven that a large number of the particles sampled were deposited on the walls of the tubing before they were properly counted leading to data that isn't representative of the real contamination levels.

The AirSens is small and lightweight and can be easily installed in robotic equipment to identify and manage particulate contamination in real time. It's newly addition of the display on the product provides monitoring on the measurement site.

Contamination control should change from reactive management to preventative contamination control management. The AirSens makes it easy to improve your overall contamination control program.



Features and Benefits

- Four channels of simultaneous particle count data
- Easy to install
- Easily installed in the process equipment eliminating transport tubing losses
- Ag sample collecting plate for off line particle analysis
- All models meet JIS Standards & ISO 21501-4
- Stainless steel enclosure
- Real time measurement display (particle channel, size)
- External vacuum source
- 1 CFM (28.3 L/min)

AirSens (Airborne Particle Sensor)

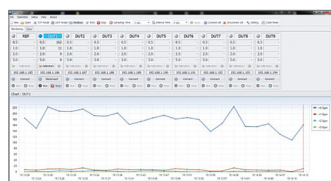
*Real-Time Particle Counting and Sizing
With Particle Collection for Off Line Analysis*

Specifications

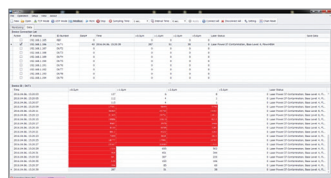
Model	AirSens-0403	AirSens-0405	AirSens-0410
Particle channel size (4ch)	0.3/0.5/1.0/5.0 μ m	0.5/1.0/5.0/10.0 μ m	1.0/5.0/10.0/20.0 μ m
Size range	0.3 ~ 5.0 μ m	0.5 ~ 10.0 μ m	1.0 ~ 20.0 μ m
Counting efficiency	50 % at 0.3 μ m	50 % at 0.5 μ m	50 % at 1.0 μ m
Concentration limits	1,200,000/ft ³ @ 5% coincidence loss		
Flow rate	1 CFM (28.3 L/min)		
Sampling time	1 sec ~ (User selectable)		
Light source	Long Life Laser Diode		
Zero count level	< 1 count /5 min. (< 0.2 count/ft ³ , < 7.06 counts/m ³), Meets ISO-21501-4 & JIS 9921B		
Display	1.7" LCD (Sample Time, Laser Power Status, Flow Status, Particle concentration by channel)		
Communication	Modbus TCP/IP		
Vacuum requirements	External Pump (> 52kPa)		
Enclosure	304 stainless steel		
Surface of sampling plate	Ag plate		
Dimension (LWH)	15.8 x 7.5 x 19.2 cm (6.3 x 3.0 x 4.7 in)		
Weight	1.17kg (2.65 lb)		
Power	POE 48V Adapter		
Warranty	2 years (Except consumables I.E. filters & pump)		

- **ACCESSORIES** Adaptor / LAN cable 1m / Sampling tube 1m / Software Program

AirSens Monitoring Software



AirSens Chart Graph



AirSens Warning display

Pump for AirSens (Part # : 10-CFP4011)

Voltage	220 ~ 240 VAC	Air Flow (LPM)	40
Rated Pressure	0.13 kg/cm ²	Case Material	STS - 304
AMP	0.32 A	Max. Vacuum	297 Milli bar
Frequency	60 Hz	Inlet pipe diameter	12mm
Weight	6.3 kg	Dimension(LWH)	29.3 x 18.1 x 19.1 cm (11.5 x 7.1 x 7.5 in)



Distributed by

Manufactured by HCTM CO., LTD.

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