

CLEAPART-100

(Particle Deposition Monitoring device)

*Representative
Contamination
Monitor*

- **Passive detection (fully representative)**
- **100 cm² collection surface**
- **Self-calibration**
- **In-situ measurement**
- **Cumulative particles counter**
- **Particules size classification**



CLEAPART-100

Particule Deposition Monitoring Device

Description

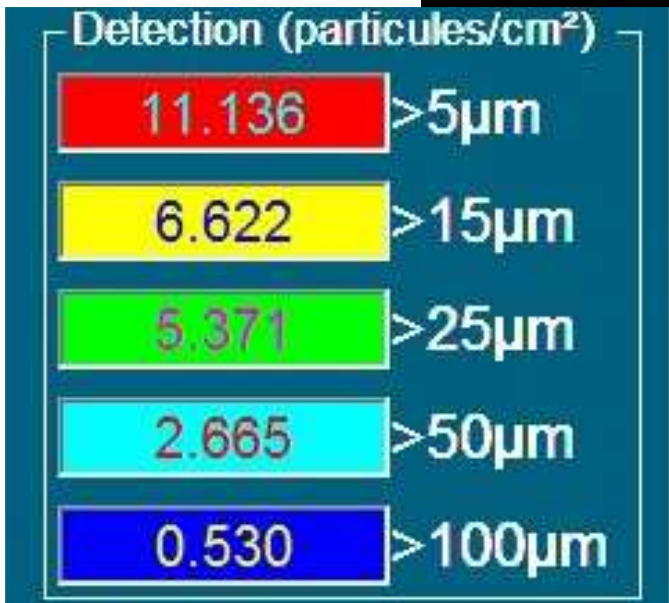
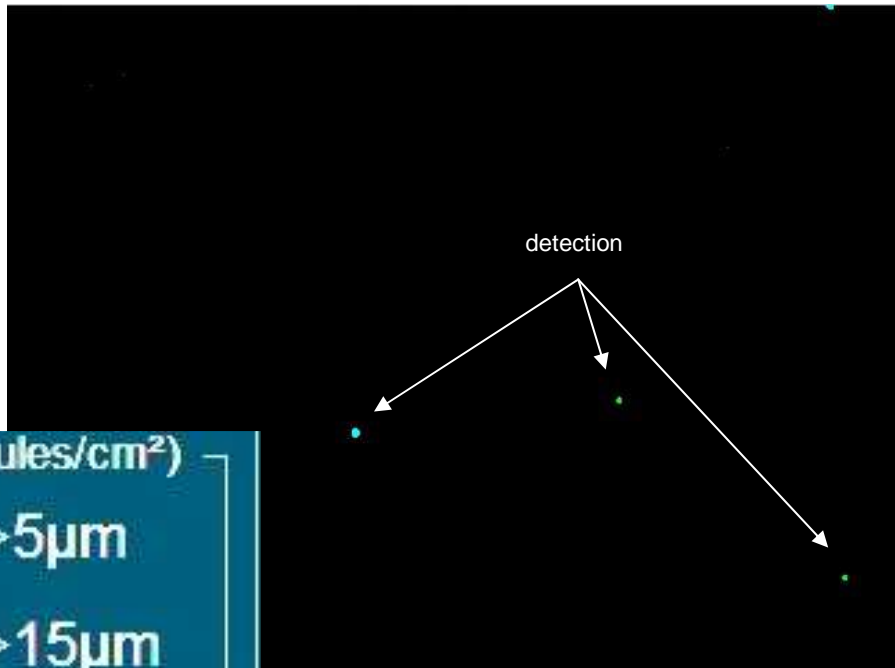
Airborne particles are not the most critical particles for your wafer, your optics, your medical device, your products, the most critical ones are the larger sedimented particles. Continuous and realtime detection and measurement of those particles is the only way to ensure your high quality product, your efficient and safe production. It favours people awareness and optimize the cleaning frequency.

The CLEAPART-100 is an autonomous device with a large – 100 cm² - collecting surface for particules. Without pump or external motion that could locally disturb the deposition phenomena, the CLEAPART-100 device scans and measures from inside the contamination on the collecting surface.

The system is set with a self-calibration system. Monitoring of either the contamination peaks or the cumulative contamination is possible. Resetting is carried out by software or by cleaning the collecting surface with - if possible – same process used for cleaning your parts.

Particle counting

The particles are detected, counted and sorted depending of their size (> 5µm, > 15µm, > 25 µm, > 100 µm).



CLEPART-100

Particle Deposition Monitoring Device

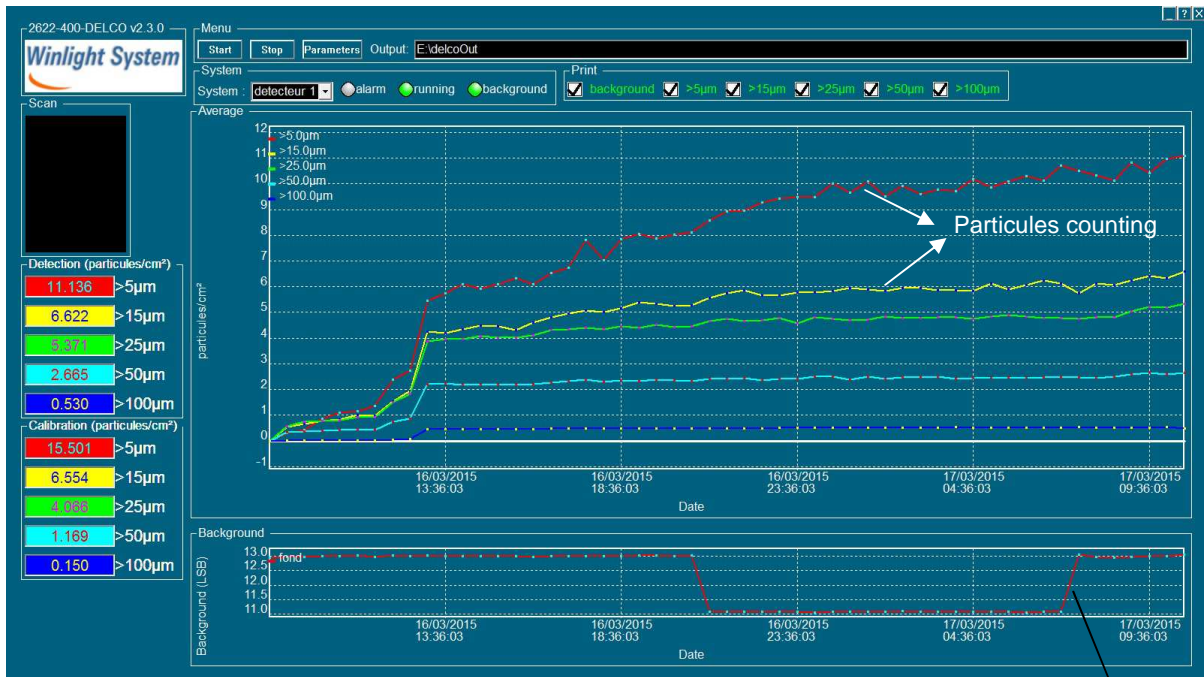
Control software

Several controls screens are available for the user.

Contamination events over time (unit is particle/cm²/hour)



Cumulative contamination from defined date (unit is particles/cm²)



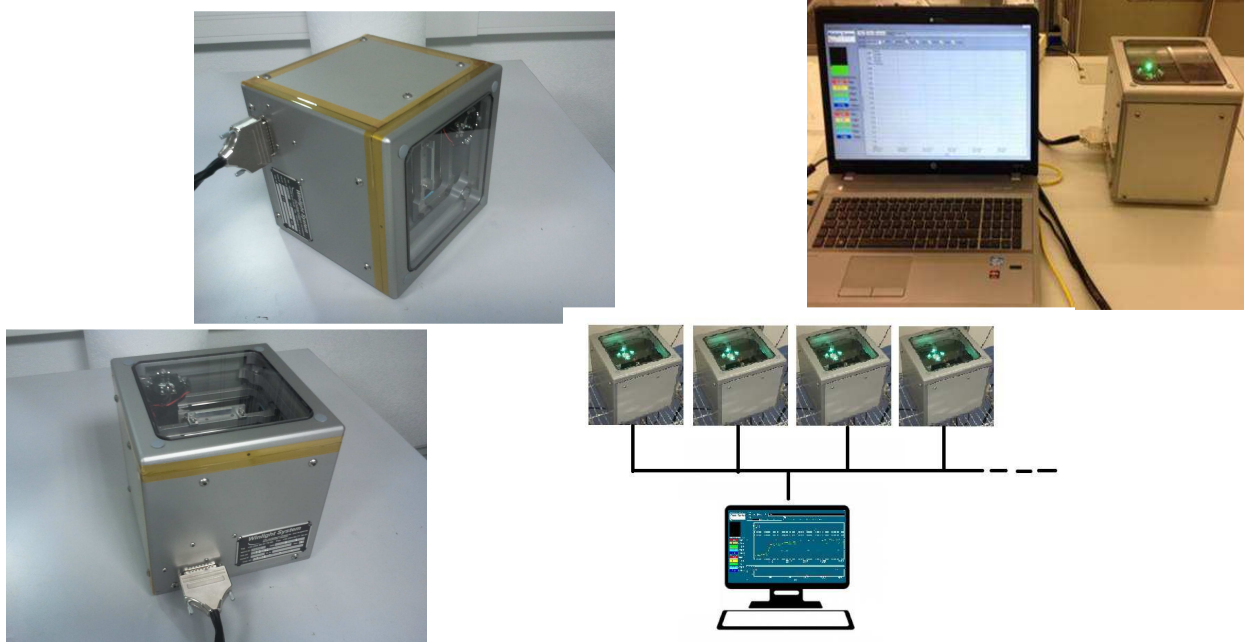
Colors are used for each plot to follow the particle size class contamination.

Dazzle monitoring

Winlight System

CLEAPART-100

Particule Deposition Monitoring Device



Technical characteristics

Detection specification :

- Pixel size : 2µm
- Number of pixels / scan : 1970 Megapixels
- No periodic calibration needed (self calibration)

Data output:

- Detected particules : $\geq 5\mu\text{m}$
- According to your predefined standard : >5 - >15 - >25 - >50 - $>100\mu\text{m}$ (IEST 1246D as an example)
- Measurement time : ≈ 15 mn/scan
- Data sorted on table
- First and last scan images available
- Scan programming (date and frequency)
- Cumulative output and by events

Software Control:

- Single unit :
 - software control delivered on CD (Windows 7, 8)
 - Ethernet link with PC (PC supplied as an option)
- Networked unit (optional) :
 - Control with web interface (OS independent)
 - Network connection

Collecting surface :

- 100 cm²
- SiO₂ glass material (other transparent glass available upon request)
- Cleanable surface (cleaning procedure provided)

Physical:

- Dimensions:
 - $> 210 \times 210 \times 200\text{mm}$ (for single unit)
 - $> 210 \times 210 \times 300\text{mm}$ (for networked units)
- Weight: $< 6\text{kg}$ (single unit only)
- Fanless (closed enclosure)

Electrical:

- Power Supply : 100-240 V

Environmental:

- Automatic test for camera dazzle
- Cleanroom suitability : ISO 4 (ISO14644-1, GMP)
- CE compliant

CLEAPART-100 is manufactured under licence from :



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