Fastmicro
Product Scanner

We help our customers to overcome today's cleanliness challenges in microtechnology. At Fastmicro, we believe you can accomplish breakthroughs in cleanliness control with fast, accurate and quantitative surface particle measurements.

Fastmicro enables process quality engineers to make reliable decisions on where and how to improve their cleanliness processes and deliver consistent quality products. And ultimately, achieve high equipment performance for their end users. To do this, we collaborate with the best to accomplish breakthroughs in cleanliness control.

Product Scanner for direct measurements on product surface

The Fastmicro Product Scanner has been developed to measure surface particle contamination levels directly on a product's surfaces in any industry. The primary applications are in semicon (pellicles, reticles, wafers) and the display market. The scanner has an unlimited scanning area due to its modular and scalable design. The system can be customized, depending on the shape and position of the surface that needs to be tested. The scanner module is also available as a white label solution for system integrators.

Modular: fit for each production process

The modular Fastmicro Product Scanner can be customized to suit each production qualification process or to fit into a production line. This can include clean and automated handling: package openers for inspection and cleaning, filling stations, robot arms, an inspection spot and a port for cleaning.
The Fastmicro module allows for a scaled inspection surface to suit customer needs, without introducing extra imaging time and using limited floor space.

CONSISTENT MEASUREMENTS IN PROCESS

1. **Fast:** imaging in seconds on large surfaces
2. **Quantified:** fit for qualification and monitoring in production, as well as in an R&D environment
3. **Easy to operate:** operator independent, even automated and clean handling. Your product stays clean: no contact, no contamination
4. **Accurate:** high-resolution measurement (quantity, position, size)
5. **Consistent:** objective measurements, time after time
6. **High throughput:** processing in minutes

fast-micro.com

fastmicro
cleanliness control

Specifications
Fastmicro Product Scanner

Fast	• Imaging in seconds on surfaces of any size
High production throughput	• Processed in a few minutes, depending on the number of particles
Scanning area	• Modular design for an unlimited scanning area in one measurement • Per scanning head 5.5″ field of view
Accurate measurements	• Detection limit from 0.2 µm PSL particles • Sizing accuracy within 20% with PSL particles • Location accuracy 80 µm, location repeatability 30 µm
Data output	• Quantity, position and size of particles • Analysis, reporting and export functions, including standard bin sizes, KLARF and Excel files • Annotated image with particle detection overlay • Optional qualification report in UI and pdf, according to ISO standard 14644-9 • Optional connection to database through XML
Ease to operate in manufacturing	• Operator independent • Automated version available with filling stations, robot arms, package openers
Clean: no contact - no contamination	• No contact with measurement area
Front side/back side/holes classification accuracy (e.g. for pellicles)	• 99% (PSL equivalent ≥ 0.2 µm and ≤ 20 µm)
Requirements on product	• Roughness Ra < 20 nm • Flatness
Model	• FM-PS-PRS-V01

Listed performance specifications are valid for areas that are not effected by straylight or shading caused by the product carrier.

fast-micro.com

fastmicro
cleanliness control

Version: V2.1021