fastmicro
Sample Scanner



Surface cleanliness validation
measurements in seconds

1. **Fast:** measurements in seconds
2. **Quantified:** objective digital output
3. **Easy to operate:** operator independent:
   - qualification in production by operators
   - analysis, for advanced users in R&D
   - monitoring, quick validation and SPC
4. **Accurate:** reliable measurements (quantity, position, size)
5. **Consistent:** reproducible measurements, time after time
6. **High throughput:** on the spot processing

Fastmicro Sample Scanner
The Fastmicro Sample Scanner measures surface particle contamination levels indirectly using samplers. These samplers benefit the user by enabling them to take surface particle samples at any time on various products and assemblies.

Indirect measurements with sampler holder
The combination of scanner and sampler allows robust measurements in places that are difficult to reach, and on relatively rough surfaces. The samplers collect particles from the surface, without causing cross-contamination.

The Fastmicro Sample Scanner measures samplers within seconds, which enables our customers to achieve an operator workflow of less than a minute.
The samplers can be transported in a clean sampler holder, re-measured and further analyzed.

The versatility of the Sample Scanner is enhanced with different interfaces, including samplers for indirect measurements and the 2-inch Wafer Interface for fallout measurements. This adaptability makes it suitable for different applications across various industries, providing robust measurements and valuable insights into contamination levels.

About Us - At Fastmicro we help our customers to overcome today's cleanliness challenges in microtechnology. We believe you can accomplish breakthroughs in cleanliness control with fast, accurate and quantitative surface particle measurements. We enable process quality engineers to make reliable decisions on where and how to improve their cleanliness processes and deliver consistent quality products, ultimately achieving high equipment performance for their end users.

specifications

Sample Scanner

Fast	• Operator workflow on the spot, processing in seconds • High throughput
Easy to operate	• Fit for use by operators in manufacturing and R&D environments • Easy selection of recipe, multi recipes possible
Field of View	• Ø 14 mm on PMC 2.0 • Ø 20 mm on Fastmicro Sampler and 2-inch wafer
Lower Detection Limit	• 0.5 µm PSL equivalent particles (NIST certified)
Reproducibility	• Relative count variant smaller than 10%, GR&R report available on request
Sizing accuracy	• Within 20% for PSL equivalent particles (NIST certified)
Remeasurability	• Non-destructive measurement • No added contamination caused by measurement
Data output and visualization	• Analysis: quantity, position and size of particles • Annotated image with particle detection overlay • '3D' signal representation of any operator-selected particle • Detailed view of raw image • Output: export function including KLARF and .csv files • Data exchange via USB, or via an ethernet connection • Remote access feature included Optional: • Qualification report in UI and PDF, according to ISO 14644-9
Indirect measurement	• Possible in combination with compatible samplers (PMC 2.0 or Fastmicro Sampler) and Sampler Holder
Direct measurement	• Possible with the use of SEMI-standard 2-inch silicon wafers
Operating conditions	• Use in a clean environment, i.e. cleanrooms with ISO 7 (ISO 14644-1), class 10 000 (FED STD 209E) or cleaner
Size and weight	• Scanner: size {LxWxH] 615 x 300 x 460 mm (24 x 11.8 x 18.1 inch), net weight 16 kg (35.27 lbs)
Model	• FM-PS-SAS-V01 • CE certified • EMC industrial norm • Language User Manual & Software: English • Included: keyboard, mouse, power cord, HDMI cable, 2x PMC 2.0 in a box • Packaging: IPCC certified plywood palletbox, size [LxWxH] 710 x 530 x 670 mm (28 x 20.9 x 26.4 inch), net weight 45 KG (99.21 lbs)

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