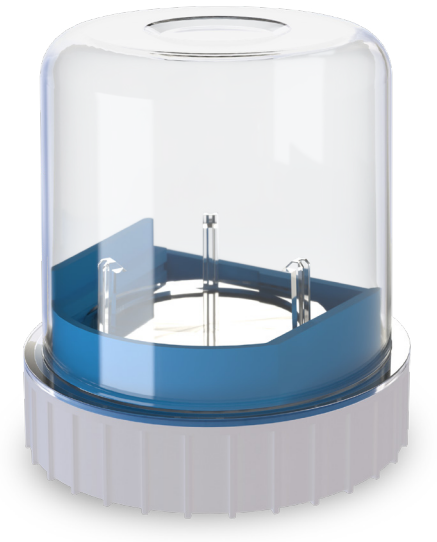
fastmicro
Surface Particle **Sampler**



Surface particle measurement
at microscale

1. **Consistent:** high and consistent particle removal efficiency of > 90%
2. **Easy to operate:** operator-independent sampling with use of the Fastmicro Sampler Operator Tool
3. **Accurate:** enables measurements with Lower Detection Limit of 0.5 µm particles
4. **Fast:** surface sampling in seconds
5. **Clean:** ultra-clean surface sampling without leaving any significant measurable residue

Submicron Particle Sampling

Fastmicro's Surface Particle (SP) Sampler is a high-performance submicron surface particle removal medium for indirect measurement of surface contamination levels, enabling repeatable quantification of particle count, size, and location.

This ultra-clean 'tape-lift' sampler allows flexible sampling on a wide variety of surfaces, including hard-to-reach or curved surfaces, without leaving any significant measurable residue. Used in combination with the Fastmicro Sampler Operator Tool, the sampler ensures consistent, operator-independent, and high-efficiency particle pickup from various surface types and materials. The SP-Sampler can be measured within seconds using the Fastmicro Sample Scanner, allowing fast inspection of particles down to 0.5 µm.

This combination offers a highly repeatable method for validating the cleanliness of critical surfaces across a range of industries, delivering robust, quantitative measurements and valuable insights into particle 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

Surface Particle **Sampler**

Fast	• Enables surface sampling and inspection within seconds (excluding relaxation time) using the Fastmicro Sampler Operator Tool and Sample Scanner
Easy to operate	• Fit for use by operators in manufacturing and R&D environments • Easy and robust with the Fastmicro Sampler Operator Tool • Easy to measure with Fastmicro Sample Scanner and Sampler Holder
Sample area	• Ø 30 mm sample disk • Ø 20 mm inspection area on the Fastmicro Sample Scanner
Lower Detection Limit	• 0.5 µm PSL equivalent particle (NIST certified) on Fastmicro Sampler Scanner
Reproducibility	• Relative count variation smaller than 10% on Fastmicro Sample Scanner
Repeatability	• Consistent particle removal efficiency > 90% of 0.5 µm PSL equivalent particles (NIST certified) on surfaces with roughness < 1.6 Ra
Relaxation time	• Recommended surface relaxation time after sampling: 20 minutes
Applicability	• For use with the Fastmicro Sample Scanner, Sampler Operator Tool and Sample Holder for indirect surface inspection within cleanroom environments
Clean	• Initial cleanliness < ISO 14644-9 SCP grade level 5 for 0.5 µm particles and larger (62 particles over Ø 20 mm inspection area - 314 mm^2) • Sampling **does not:** - degrade the cleanliness - result in stains - result in significant outgassing risk - introduce foreign elements on the sampled surface *(supporting evidence available on request)*
Material & Packaging	• Sampling disk material: Thermoplastic Polyurethane (TPU) • Substrate cover on sampling area for new Samplers • Samplers individually packed in cleanroom-compatible container with label for traceability • Supplied in sets of 6 (minimum order quantity) in a cleanroom box (120 x 60 x 30 mm)
Model	• FM-CS-SAS-SPS-V01

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