





5 μL – 10 mL Sample Volume 96 Sample Automation 1 Minute Per Sample



ABOUT BACKGROUNDED MEMBRANE IMAGING (BMI)

BMI is a better way of measuring particles on membranes: First, a background image of the membrane is taken. Next, samples are vacuumed through the filter and subsequently re-imaged. The background and sample images are processed together in order to remove the membrane texture and identify particles.

PRODUCT SPECIFICATIONS

Imaging area24.6 mm²Illumination modesBrightfield illumination (LED 455 nm) and side illumination (LED 465 nm)Sampling efficiency100%Minimum sample volume5 μL (assay dependent)Resolution1.0 pixel/µmParticle size range (detection and quantitation)>1 µmMaximum particle concentration (1.6 µm particle size)>3,000,000 particles/mLMaximum protein concentration (1.6 µm particle size)>3,000,000 particles/mLMembrane pore size0.4 µm or 0.8 µmThroughput1 minute per sampleSample format96-well filter membrane plateRefractive index impactNone (imaging in air)Cross-contaminationNone (zero carryover)Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)Instrument dimension13.5 in x 18 in x 13 in	Technology	Backgrounded Membrane Imaging (BMI)
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Membrane pore size0.4 μm or 0.8 μmThroughput1 minute per sampleSample format96-well filter membrane plateRefractive index impactNone (imaging in air)Cross-contaminationNone (zero carryover)Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	•	>3,000,000 particles/mL
Throughput1 minute per sampleSample format96-well filter membrane plateRefractive index impactNone (imaging in air)Cross-contaminationNone (zero carryover)Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Maximum protein concentration	250 mg/mL
Sample format96-well filter membrane plateRefractive index impactNone (imaging in air)Cross-contaminationNone (zero carryover)Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Membrane pore size	0.4 μm or 0.8 μm
Refractive index impactNone (imaging in air)Cross-contaminationNone (zero carryover)Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Throughput	1 minute per sample
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Air bubblesNot measured (filtered away)Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Refractive index impact	None (imaging in air)
Robotic compatibilityYesSoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Cross-contamination	None (zero carryover)
SoftwareParticle VUE 3.0 all-in-one software suite (image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Air bubbles	Not measured (filtered away)
Software(image catpure and analysis)Operating systemWindows 10PowerUniversal input (90-264 Vac)	Robotic compatibility	Yes
Power Universal input (90-264 Vac)	Software	
	Operating system	Windows 10
Instrument dimension13.5 in x 18 in x 13 in	Power	Universal input (90-264 Vac)
	Instrument dimension	13.5 in x 18 in x 13 in
Instrument weight 56 lbs	Instrument weight	56 lbs

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