

# SASS™ 3010

## PARTICLE EXTRACTOR



### Feature Highlights

- **Extraction efficiency of 60-80% in only 1-2 minutes**
- **Extremely low carryover from prior samples**
- **Operates from 0 to 70°C**
- **Small and lightweight- 800 grams (1.8 lbs)**
- **Requires only 2 'D' sized batteries**

The SASS® 3010 Particle Extractor is used to extract particles that were collected onto an electret filter using the SASS 3100 Smart Air Sampler System, and then to transfer these extracted particles into a buffer solution to preserve any Bio Agents until they can be identified.

Captured particulates can be difficult to remove from an electret filter because induced dipole fields create a strong holding force which must be neutralized. Once particulates have been released, they must be removed from the fibrous filter matrix and collected into a small amount of fluid. These processes are efficiently performed in a matter of 1 to 2 minutes using the SASS 3010 Particle Extractor. Extraction efficiencies have been found to be in the range of 70 to 80% for micron sized particles typical of Bio Agents.

The buffer solution containing these extracted particles can then be tested to identify the presence of high threat Bio-Agents using NIDS Nano Intelligent Detection System immunoassays and Bio-Seq PLUS Late PCR assays.

Smiths Detection is a global distributor of SASS 3010, manufactured by Research International (RI). RI is an official licensee of the U.S. government for the TacBio and has the right to manufacture and sell the instrument worldwide. RI is an innovative provider of leading edge Bio-Detection and Bio-Collection technologies.

# Technical Data **SASS 3010**

## General Specifications

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Size	Body: 10 x 13 x 14.5 cm (3.9 x 5.1 x 5.7 in) (7.8 cm-high plunger protrudes from the extractor's top surface) Unit: 2.0 kg (4.4 lbs); add 1 kg (2.2 lbs) for battery
Weight	800 grams (1 lb, 12 oz)
Operating temperature range	0°C to 70°C (32°F to 158°F)
Storage temperature range	0°C to 70°C (32°F to 158°F)
Humidity range	All-weather. Optional rain shield prevents wetting of filter during rainy conditions
Operating principle	Acoustic vibration of the fluid-saturated filter is followed by counter flow discharge of the suspended aerosol particles
Filter compatibility	For use with SASS 3000 and SASS 4000 filters
Extraction efficiency	60-80% typical
Carry-over	1.1% with dry wiping, and 0.01% to 0.1% with a 5 ml flush between samples
Extraction time	1 to 2 minutes, typical, with a flush cycle
Extraction fluid	A pre-filled dropper bottle provides enough buffered extraction fluid to collect a 5 ml sample
Sample fluid storage	The extraction fluid bottle is also used for fluid sample storage upon extraction completion
Electrical power	Two size "D" primary batteries



Sass electret filter

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For product information, sales, or service, please go to [www.smithsdetection.com/locations](http://www.smithsdetection.com/locations)

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