

# IMPACT Sampler

Sharp Size Selection for PM10, PM2.5, or PM Coarse

- Ideal for environmental PM sampling and indoor air studies
- Use with any pump at 10 L/min
  - Leland Legacy pump optimized for use with IMPACT
- Compact design - only 8 ounces!
- Higher flow rate provides increased sensitivity
- Fast media changes with removable filter cassette
- Disposable ready-to-use pre-oiled impaction discs reduce particle bounce — no impaction grease needed!
- Rain cover included to protect sampler during outdoor use
- Optional quick-mount bracket accessory secures sampler virtually anywhere



The patented\* SKC IMPACT single-stage inertial impactor is designed for efficient collection of PM10, PM2.5, or PM Coarse (10-2.5) in ambient air. Operated at 10 L/min constant flow, larger particles are captured on a disposable pre-oiled impaction disc while smaller particles collect on a 47-mm filter. The filter and impaction disc are housed in a removable filter cassette. The IMPACT's higher flow rate provides increased sensitivity for low levels of PM.

## IMPACT — The Heart of the SKC Deployable Particulate Sampler (DPS) System

*The IMPACT Sampler is the sampling head for the SKC DPS System.* Coupled with the power of the Leland Legacy® Sample Pump, the DPS System provides all the equipment needed in one compact heavy-duty case for secure 24-hour ambient and indoor sampling. Applications include fenceline, near-roadway, and remediation monitoring; baseline surveys; and indoor air studies. See more on the DPS System at [www.skcinc.com](http://www.skcinc.com).

\* U.S. Patent No. 7,334,453



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Sharp Size Selection for PM<sub>10</sub>, PM<sub>2.5</sub>, or PM Coarse (10-2.5)

## IMPACT and Leland Legacy Pump

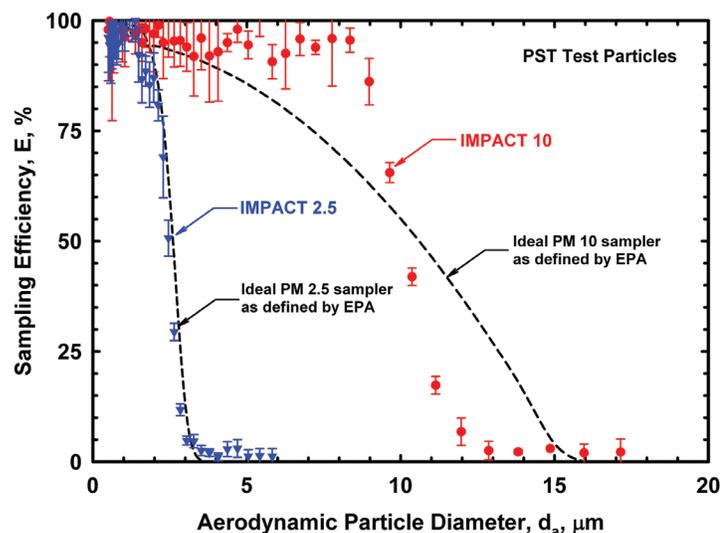
While IMPACT can be used with any pump at 10 L/min, partnering IMPACT with the Leland Legacy Sample Pump provides a highly efficient sampling system. The Leland Legacy pump is quiet, fully programmable, and provides a constant 10 L/min flow rate for 24 hours, making it ideal for environmental monitoring or indoor air studies. See more at [www.skcinc.com](http://www.skcinc.com).



## IMPACT Applications

- Perimeter monitoring at industrial/manufacturing sites
- Dust monitoring at landfill remediation sites
- Fugitive dust monitoring from cropland erosion
- FRM network validation studies
- Urban air quality studies
- Fenceline sampling at coal-fired plants
- Indoor air studies

## IMPACT Performance



Sampling efficiency of the IMPACT 2.5 and IMPACT 10 measured in an aerosol test chamber. Field test data is available at [www.skcinc.com/media/documents/other-docs/modular-impactors-poster-presentation.pdf](http://www.skcinc.com/media/documents/other-docs/modular-impactors-poster-presentation.pdf)

## Performance Profile

<b>Flow Rate:</b>	10 L/min
<b>50% Cut-point:</b>	10 μm or 2.5 μm (model dependent)
<b>Impaction Discs:</b>	<i>For reduction of particle bounce:</i> 37-mm disposable pre-oiled porous plastic discs <i>For chemical analysis of larger particles:</i> 37-mm filter (quartz or PTFE <sup>†</sup> )
<b>Collection Filter:</b>	47-mm filter, select material based on application
<b>Impactor Material:</b>	Aluminum (inlet) with brass barbed fitting for 3/8-in ID tubing
<b>Dimensions and Weight:</b>	2.6 dia. x 1.8 H x 3.8 L in (7 x 5 x 10 cm), 8 oz (0.23 kg)
<b>Analysis:</b>	Gravimetric and/or chemical

## Ordering Information

Description	Cat. No.
<b>IMPACT Sampler</b> includes sampler inlet and body, filter cassette, calibration adapter, and rain cover, <i>requires impaction substrate and collection media below</i>	
PM <sub>10</sub>	225-390
PM <sub>2.5</sub>	225-392
PM Coarse includes 2 filter cassettes	225-3911
<b>Recommended Collection Filters,<sup>‡</sup> required for each sample; select a filter based on application</b>	
Quartz Filters, 47 mm, Tissuquartz, 432 μm thick, pk/25	225-1823
PTFE Filters, <sup>†</sup> 47 mm, 2.0 μm, with PMP support ring, pk/50	225-1747
<b>Impaction Substrate, required for each sample, select an impaction substrate based on application</b>	
<b>To Reduce Particle Bounce</b>	
Impaction Discs, 37 mm, pre-oiled, ready to use, disposable, limited shelf-life	
pk/10	225-395B
pk/25	225-395
pk/50	225-395A
<b>For Chemical Analysis of Larger Particles</b>	
Quartz Filters, 37 mm, Tissuquartz, 432 μm thick, pk/25	225-1822
PTFE Filters, <sup>†</sup> 37 mm, 2.0 μm, with PMP support ring, pk/50	225-1709
<b>Accessories</b>	<b>Cat. No.</b>
Mounting Bracket	225-399
Filter Cassette Opener	225-397
PM Coarse Ring includes filter cassette, adapts IMPACT PM <sub>10</sub> to an IMPACT PM Coarse	225-3912

<sup>†</sup> Back pressure on PTFE filters can vary within the same lot

<sup>‡</sup> Recommended filters for use with Leland Legacy Sample Pump