

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 field replaceable filter cassette
- No impaction grease needed!
 - Ready-to-use pre-oiled disposable impaction discs reduce particle bounce
- Rain cover included for outdoor use
- 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 field replaceable 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 monitoring, saturation sampling, exposure level hot spot determination, and fenceline monitoring. See www.skcinc.com/prod/100-3901.asp.



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



IMPACT Sampler

Sharp Size Selection for PM₁₀, PM_{2.5}, or PM Coarse (10-2.5)

IMPACT and Leland Legacy Pump

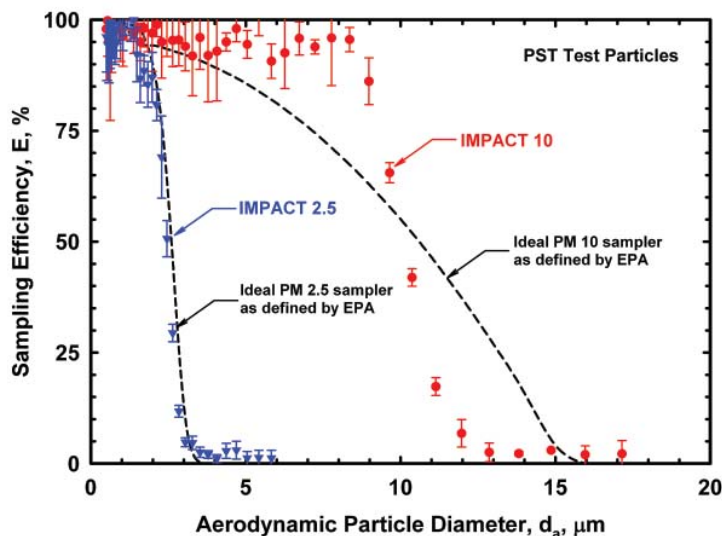
While IMPACT can be used with any pump at 10 L/min, partnering IMPACT with the Leland Legacy Sample Pump provides a highly efficient sampling system. The Leland Legacy pump is quiet, fully programmable, and provides a constant 10 L/min flow rate for 24 hours making it ideal for environmental monitoring or indoor air studies. See www.skcinc.com/pumps/100-3000.asp.



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/instructions/Modular_Impactors_Poster.pdf.

Performance Profile

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

Ordering Information

Description	Cat. No.
IMPACT Samplers include sampler inlet and body, filter cassette, calibration adapter, and rain cover, <i>require impaction substrate and collection filters below</i>	
PM₁₀	225-390
PM_{2.5}	225-392
PM Coarse includes 2 filter cassettes	225-391A
DPS System,[‡]# includes Leland Legacy Sample Pump with connection case, charger (100-240 V), 2 external battery assemblies with adapters (packaged separately), IMPACT Sampler, 2 filter cassettes, calibration adapter, rain cover, 25 disposable impaction discs, calibration device, filter cassette opener, tubing with quick-connect fitting, calibration tubing, and mounting bracket, in a heavy-duty lockable carry case	
PM₁₀	100-3901
PM_{2.5}	100-3903
Recommended Collection Filters,[‡] required for each sample; select filters based on application	
Quartz Filters, 47 mm, Tissuquartz, 432 μm thick, pk/25	225-1823
PTFE Filters,[†] 47 mm, 2.0 μm, with PMP support ring, pk/50	225-1747
Impaction Substrate for IMPACT Sampler, <i>required for each sample, select an impaction substrate based on application</i>	
To Reduce Particle Bounce	
Impaction Discs, 37 mm, pre-oiled, ready to use, disposable	
pk/10	225-395B
pk/25	225-395
pk/50	225-395A
For Chemical Analysis of Larger Particles	
Quartz Filters, 37 mm, Tissuquartz, 432 μm thick, pk/25	225-1822
PTFE Filters,[†] 37 mm, 2.0 μm, laminated PTFE support, pk/50	225-27-07
Accessories	Cat. No.
Mounting Bracket	225-399
Filter Cassette Opener	225-397

[†] Back pressure on PTFE filters can vary within the same lot

[‡] Provides data similar to data from Federal Reference Method samplers. The DPS System is not a U.S. EPA reference or equivalent method for compliance sampling.

[‡] Recommended filters for use with Leland Legacy Sample Pump

[#] DPS Systems contain Li-Ion batteries and are subject to special shipping regulations.

[§] Use in non-explosive environments only. Not UL Listed for intrinsic safety

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to <http://www.skcinc.com/warranty>.

