

Dekati®

Gravimetric Impactor DGI

- ▶ High sample flow rate cascade impactor
- ▶ Particle size distribution measurements
- ▶ Low concentration measurements



Excellence in Particle Measurements

Dekati® Gravimetric Impactor DGI



The Dekati® Gravimetric Impactor (DGI) is a high sample flow rate cascade impactor for low concentration particle measurement applications. The DGI measures gravimetric particle mass size distribution of particles < 2.5 µm in five size fractions.

Typical measurement applications of the DGI impactor include engine emission measurements, air quality studies and other low concentration applications where high sample flow rate is needed. The DGI collects size classified particles on Ø47 mm substrates that are analyzed gravimetrically or chemically after the measurement. The smallest particle size fraction is collected on a Ø70 mm filter.



Applications

- Outdoor air quality measurements
- Occupational health and safety measurements
- Engine emission measurements
- Other low concentration particle measurement applications

Features

- Particle mass size distribution in five size fractions < 2.5 µm
- Enables chemical analysis of the size classified particles
- High sample flow rate; each unit calibrated for 50, 60, 70, 80, 90 and 100 lpm
- High sample yield even in low concentration measurements
- Easy-to-use & robust stainless-steel construction
- Each unit manufactured and calibrated in Finland
- Complete measurement solutions available for different applications



► **Dekati Ltd.** is a world leader in designing and manufacturing innovative fine particle measurement solutions. We have over 25 years of experience in providing measurement instruments and complete measurement solutions to a wide variety of environments and sample conditions. All Dekati® Products are developed and manufactured in Finland and are available with up to five-year warranty.



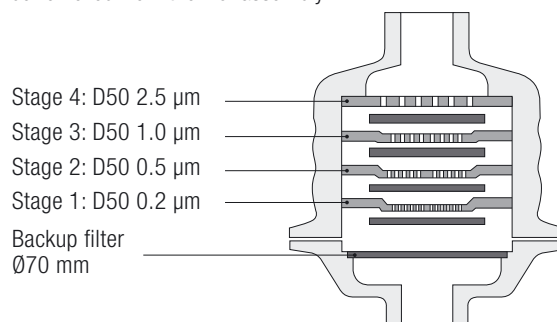
Specifications

Stage cutpoints	@ 70 lpm: 2.5 – 1.0 – 0.5 – 0.2 µm
Sample flow rate	70 lpm nominal, calibration values provided for 50, 60, 70, 80, 90 and 100 lpm. Mass flow controller recommended for flow control.
Collection substrates	Ø47 mm, aluminium foils
Backup filter	Ø70 mm, Teflon coated fiberglass
Inlet	ISO ½" female (Male quick connect fitting R1/2" provided)
Outlet	ISO ½" female (Female quick connect fitting R1/2" provided)
Weight	2.25 kg
Dimensions	H110 mm x W130 mm

Stage D50 Cutpoints

Sample flow rate, lpm	50	60	70	80	90	100
Stage 4, µm	3.0	2.7	2.5	2.3	2.2	2.1
Stage 3, µm	1.2	1.1	1.0	0.9	0.9	0.8
Stage 2, µm	0.61	0.55	0.50	0.46	0.43	0.40
Stage 1, µm	0.26	0.23	0.20	0.18	0.15	0.13

Each DGI impactor is individually calibrated before delivery for exact D50% values with the specified flow rates. If detailed information on the size distribution is not needed, some of the impactor stages can be removed from the DGI assembly.



For more information, please contact: sales@dekati.com