



Excellence in Particle Measurements



Dekati® **eDiluter™**

Portable sample conditioning and dilution system

Optimized for diluting combustion aerosols

Fixed, stable dilution factor



The **Dekati® eDiluter™** is a portable dilution system that makes sample conditioning as easy as can be. The Dekati® eDiluter™ comes standard with a fixed 1:60 dilution factor, but it can as well be provided with a customer specific dilution factor in the range of 1:25-1:225. The high sample output flow of the Dekati® eDiluter™ allows the system to be fully integrated with all Dekati® Instruments and is also compatible with all other commercially available particle measurement instruments.

The operating principle of the Dekati® eDiluter™ is based on a two-stage dilution. The first dilution stage is heated while the second dilution stage operates at room temperature where the aerosol sample is also cooled in a controlled manner. Each dilution stage consists of an ejector diluter with additional sheath air flow. The use of a large ejector nozzle and sheath air reduces the need for cleaning, and also minimizes particle losses within the system.

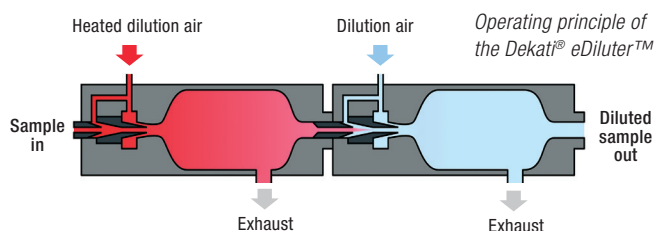


Features

- Portable two-stage dilution system for particle measurement applications
- Fixed, stable dilution factor
- Dilution factor not affected by the flow drawn to measurement instruments
- Adjustable dilution temperature
- Sophisticated, no moving parts dilution stage design, optimized for minimal particle losses
- Two additional, integrated temperature controllers for regulating the temperature of external heaters such as a heated sampling line and heated sampling probe
- Instrument control via integrated display UI
- Complete measurement setups available for engine exhaust measurements and stationary source sampling
- Can be upgraded to Dekati® eDiluter™ Pro with adjustable dilution factor 1:25-225 and other advanced features
- Each unit individually calibrated and provided with a calibration certificate



Dekati Ltd. is a world leader in designing and manufacturing innovative fine particle measurement solutions. We have 30 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.



Accessories

- Pressurised air cleaning and drying unit for dilution air
- Heated sampling lines, sampling probes and isokinetic sampling nozzles
- Stack heater for stationary source emission measurements
- Sampling cyclones

Specifications

Dilution factor	Standard 1:60 Customized DF 1:25 - 1:225 available upon request
Inlet pressure monitoring	Yes. Alarm when min. and max. pressure values are exceeded
Sample pressure (inlet)	900-1200* mbar
Sample temperature (inlet)	Max. 600 °C
Diluted sample temperature (outlet)	Close to ambient
Sample flow rate (inlet)	~7 lpm @ DF 1:60
Diluted sample flow (outlet)	~60 lpm
Dilution temperature	Max. 400 °C
Dilution air	Clean and dry pressurized air, min 5 bar abs., ~100 lpm
Power requirements	110 – 230 V Max 600 W with heated dilution Max 2.6 kW with two external heaters @ 230 V, max 1.6 kW @ 110 V
Dimensions	H205 x W168 x D520 mm
Weight	7.3 kg
Dilution stage material	Stainless steel, AISI 316

* Sample pressure affects dilution factor, calibration data sheet for different inlet pressures provided with the system.

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

