

Dekati®

# Engine Exhaust Diluter DEED

- ▶ Engine exhaust dilution and conditioning
- ▶ Fulfills EURO 6 and ISO 8178 standards
- ▶ Compatible with all particle number and mass measurement systems



Excellence in Particle Measurements

# Dekati® Engine Exhaust Diluter DEED



The Dekati® Engine Exhaust Diluter DEED is an engine exhaust conditioning system that fulfills all requirements and recommendations set forth by EURO 6 legislation for a VPR (Volatile Particle Remover). The DEED unit can be used together with any particle concentration or size distribution measurement device since the sample at the outlet of the DEED is in ambient temperature and pressure, and the pressure fluctuations are minimal. Each DEED unit is calibrated for PCRf (Particle Concentration Reduction Factor) and evaporation efficiency as required in the EURO 6 legislation and provided with a calibration certificate.

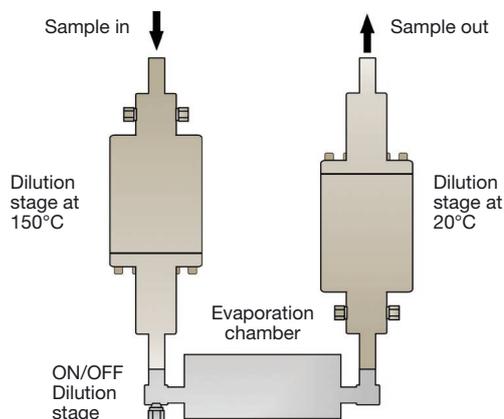
The operation of the DEED is based on two particle number diluters (PND) and an evaporation chamber between the two diluters. The diluters used in the DEED system are Dekati® Ejector Diluters that have a stainless steel, no-moving-parts construction. This provides the needed reliability even for long term operation and makes the whole system simple and easy to operate. An additional, optional dilution stage is placed in front of the second Dekati® Diluter to further increase the dilution factor. All the components of the DEED system are contained in a rack mountable cabinet.

## Specifications

<b>Dilution factor</b>	~ 100 (with low DF selected) ~ 100-1000 (with high DF selected), can be specified
<b>Evaporation tube temperature</b>	300-400 °C
<b>Evaporation efficiency</b>	As described in EURO 6
<b>Particle concentration reduction factor (PCRf)</b>	As described in EURO 6
<b>Pressurised air requirement</b>	120 slpm @ 3 bar gauge
<b>Dimensions</b>	9U height, fits into 19" rack
<b>Sample intake Approx.</b>	5 lpm
<b>Diluted sample output</b>	0-40 lpm
<b>Power supply</b>	90-240 V, ~2 kW

For more information, please contact: [sales@dekati.fi](mailto:sales@dekati.fi)

► **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.



## Features

- Fulfills all EURO 6 recommendations for a VPR
- Fulfills ISO8178:2017 standard for exhaust emission measurements
- Dilution factor (PCRf) calibrated with solid particles
- Evaporation efficiency calibrated with tetracontane particles
- Simple user interface - only two operation switches
- High/Low dilution factor (100 or 1000)
- Heating on/off
- Always constant dilution factor
- The entire instrument contained in a rack mountable cabinet
- Accessories available also for tailpipe sampling both before and after a DPF



Dekati® High Pressure Diluter DEED-300

## Tailpipe Sampling

- DEED-150 Post-DPF sampling probe  
Connection of the DEED directly into an exhaust line
- DEED-300 Pre-DPF sampling probe  
Enables sample conditioning from pre-DPF conditions
- Pressurised air cleaning and drying unit
- Catalytic stripper as an option to the evaporation chamber

