# Dekati® Engine Exhaust Diluter DEED

- Engine exhaust conditioning
- According to EURO5b/6 legislation
- Compatible with all particle number and mass measurement systems



#### **Dekati**®

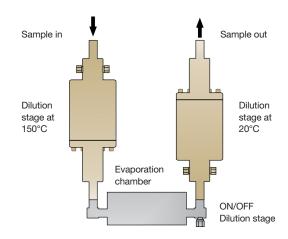
# **Engine Exhaust Diluter DEED**

The Dekati® Engine Exhaust Diluter DEED is an engine exhaust conditioning system that fulfils all requirements and recommendations set in EURO5b/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 EURO5b/6 legislation and provided with a calibration certificate.

The operation of the DEED is based or two particle number diluters (PND) and en 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**

Dilution factor	~ 100 (with low DF selected) ~ 100-1000 (with high DF selected), can be specified
Evaporation tube temperature	300-400 °C
Evaporation efficiency	As described in EURO5b/6
Particle concentration reduction factor	As described in EURO5b/6
Pressurised air requirement	120 slpm @ 3 bar gauge
Dimensions	9U height, fits into 19" rack
Sample intake	Approx. 5 lpm
Diluted sample output	0-40 lpm
Power supply	90-240 V, ~2 kW



#### **Features**

- Fulfills all EURO5b/6 recommendations for a VPR
- 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
- · Accessories available also for tailpipe sampling both before and after DPF

## Tailpipe Sampling

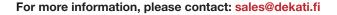
#### DEED-150 Post-DPF sampling probe

• Connection of the DEED directly into an exhaust line

#### DEED-300 Pre-DPF sampling probe

• Enables sample conditioning from pre-DPF conditions







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Dekati Ltd. is specialized in the design and manufacture of innovative fine particle measuring and sampling devices. Since its founding in 1994, Dekati has become the technological market leader in producing fine particle measurement instrumentation for various applications and thousands of customers.