

Dekati Quality

All Dekati operations are in compliance with the Quality Management Standard ISO 9001:2015 within the scope of: "Design and development, manufacture, sale of and services related to fine particle measurement and aerosol sample conditioning instruments, sensors, accessories and their components".

ISO 9001 is the world's most recognized quality management standard, and it is based on several quality management principles including strong customer focus and continual improvement. Receiving the official certification demonstrates our ability and will to meet and exceed our customers' expectations.

As stated in our Quality Policy, we can now demonstrate our commitment to provide world-class fine particle measurement solutions to our customers, and further strengthen our customer focus:

"The aim of our quality policy is to develop and manufacture high quality particle measurement solutions and services to our customers' needs. Our goal is to meet and exceed our customers' requirements and expectations on product quality, operational features, and delivery and after-sales services. We are committed to continuously improve our products, internal processes, and capabilities to ensure and secure successful operation of our company."

Quality in Dekati® Instruments

All Dekati® Instruments are designed and manufactured in Finland with strict quality requirements and provided with a standard two-year warranty. Each manufactured unit is individually and thoroughly tested with relevant traceably calibrated flow, pressure, temperature, voltage, current and particle measurements.

Additionally, all Dekati® Instrument models go through rigorous type-approval tests, where the instrument response is tested with changes in temperature, pressure and humidity. Additional misuse tests are carried out to make sure that the instruments are ready for any environment. These procedures ensure that every shipped instrument operates according to the specifications and that the measurement data from the instrument is reliable and reproducible.

- All units original Dekati® Design
- All units manufactured and calibrated in Finland
- All units individually calibrated and provided with a calibration certificate
- All units provided with standard two-year warranty, up to five-year warranty available for all Dekati® Products
- All units CE certified
- All units designed with robust structure for use in field conditions

While Dekati's product line includes a wide range of stand-alone instruments for fine particle measurement applications, Dekati's brand division Dekati Technologies now offers tailored particle sensors for integration into industrial systems.

Visit www.dekatitechnologies.com to find out more details on our customizable sensors with various integration options specifically for industrial applications and into customer specific systems.

For more details on Dekati Ltd. and our products, visit www.dekati.com or contact us at sales@dekati.com



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. We take pride in the quality and robustness of our products and are committed to finding the best possible solution for your aerosol measurement needs.

Our experience and expertise in aerosol measurement applications is at your disposal throughout the lifecycle of your investment via our global partner network. Our partner network serves our customers in more than 40 countries and many of them have been trained by Dekati engineers to provide local instrument maintenance services.

Dekati® Instruments are used in a broad range of application areas, such as:

- Combustion process studies and emission measurements
- Engine emissions
- Non-exhaust vehicle emissions (brake wear and tyre wear emissions, blow-by gas)
- Air quality
- Occupational health and industrial hygiene
- Filtration research and testing
- Nanotechnology and material processing
- Aerosol research
- Nuclear safety research
- Carbon Capture and Sequestration (CCS)



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















Dekati® Product Line



Fine particle measurement instruments

Real-time particle concentration and size

Gravimetric particle size distribution

Aerosol dilution and sample conditioning

Complete measurement solutions

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Dekati® Real-Time Particle Measurement Instruments

Dekati's broad selection of fine particle measurement instruments includes several real-time particle analyzers that are well-suited to an extensive range of applications. Our real-time particle analyzers enable fast and accurate measurement of particle concentration. size distribution and charge levels, even at elevated temperatures.

All Dekati® Instruments use a single measurement technology throughout the entire specified particle size range.



Dekati® MPEC+™

- Mobile Particle Emission Counter for PEMS measurements
- Fast, accurate particle number (PN) detection
- Minimum particle size detection can be set at 10 nm or 23 nm
- Based on certified ePNC™ technology



Dekati® eFilter™

- Standard and real-time PM measurement in a single instrument
- Standard gravimetric filter measurement
- Real-time PM, PN and LDSA concentration
- Measurement according to ISO 16000-34 and ISO 16000-37



High Resolution ELPI®+

- Real-time measurement of particle size distribution and con-
- Detailed particle size distribution analysis from 6 nm to 10 μm in up to 500 size classes
- Simultaneous particle number, mass and LDSA concentration measurement
- Possibility of post-measurement chemical characterization of size classified impactor sample
- The universal instrument of choice for a vast range of measurement applications



High Temperature ELPI®+ Upgrade

- HR-ELPI®+ adapted for high temperature applications
- Direct sampling of hot aerosols up to 180 °C
- Direct measurement from emission source
- Aerosol volatility studies

Dekati® Aerosol Sampling & Conditioning Solutions

Dekati® Aerosol Dilution and Sample Conditioning Instruments enable particle sampling from virtually any source. We can provide complete sampling setups for a very broad range of applications and demanding measurement conditions. All Dekati® Sample Conditioning Instruments are made of stainless steel, allowing sampling from high temperatures



Dekati® Oxidation Flow Reactor DOFR™

- Compact and portable oxidation flow reactor for secondary aerosol formation studies
- Fast response time allowing transient emission studies
- Complete setup with full and automatic control of oxidation parameters for PAM studies
- Fixed reactor residence time and high outlet sample flow
- Integrated ozone and humidity control and measurement



Dekati® High Pressure Diluter DEED-300

- Aerosol dilution from high sample pressure conditions
- Ideal for Pre-DPF measurements
- Always constant dilution factor



Dekati® Diluter

- Ejector diluter for combustion aerosol dilution
- Controlled sample conditioning with constant dilution factor Reliable and easy-to-use operation without moving parts
- Heated dilution setups for combustion aerosol sampling



Dekati® eDiluter™ Pro

- Advanced, automated dilution system
- Adjustable dilution factor and dilution temperature
- Stable dilution factor even in variable sample pressure conditions
- Independently certified VPR (Volatile Particle Remover) according to UN/ECE-R83 (Rev.5), UN/ECE-R49 (Rev.6) 2017/1151 and 2017/1154 (RDE). Compliant with SAE AIR 6241 and UN GTR24 with optional catalytic stripper element.
- 1200°C sampling with high temperature sampling probe acces-



Dekati® eDiluter™

- Portable sample conditioning and dilution system optimized for diluting combustion aerosols
- Two-stage dilution system with controllable dilution temperature
- · Fixed, stable dilution factor



Dekati® Smoking Machine

- Real-time sampling solution for ENDS, eCigarette, eLiquid and vaping systems
- Adjustable puff profile and volume
- Compatible with various measurement solutions

Dekati®

Gravimetric Impactors

The Dekati® Gravimetric Impactor line consists of four different impactor models for determination of gravimetric particle mass size distribution. All impactor models are well-characterized, individually calibrated and provided with an instrument specific calibration certificate.

Dekati® **Low Pressure Impactor DLPI+**

- Particle mass size distribution in 14 size
- Wide operational size range of 16 nm 10 μm Can be upgraded to ELPI®+ instrument for
- real-time data measurements
- Complete setups available for a wide variety of applications



Dekati® High Temperature DLPI+

- DLPI+ adaption for high temperature applications
- Direct sampling of hot aerosols up to 180 °C
- Direct connection to the emission source

Dekati® PM10 Impactor

- PM10, PM2.5 and/or PM1.0 measurement
- Particle emission measurement according to ISO23210
- Air quality measurement setups available with sampling inlets
- Robust, stainless steel construction allows direct sampling even from demanding measurement conditions



Dekati® Gravimetric Impactor DGI High sample flow rate cascade

- Particle mass size distribution for
- <2.5 µm particles Particle collection on 47 mm filters

OEM Particle Sensors by Dekati Technologies

Besides our full instrument range, we provide particle measurement sensors for integration into OEM systems under the Dekati Technologies brand.

Dekati® ePNC™

- Compact, versatile particle number sensor
- Easy to integrate in OEM emissions testing devices and monitoring systems
- Robust design with consistent performance



Dekati® Solutions

In addition to Dekati® Products, Dekati provides a wide range of instrument accessories for complete fine particle measurement setups. The accessories include e.g. sampling inlets for air quality measurements, isokinetic sampling nozzles, standard and heated sampling lines. With these additional parts, Dekati can provide complete measurement solutions for a wide range of measurement applications.



www.dekati.com www.dekati.com www.dekati.com