

## D-RC 120

### Automatic sampling device for gravimetric dust measurements

- Portable system
- Easy handling
- Automatic isokinetic control
- Highest measuring accuracy
- Compliant to EN 13284-1 and  
US-EPA Method 5



## Automatic sampling device for gravimetric dust measurements

### Features

- Portable system
- Easy handling
- Automatic isokinetic control
- Suitable for in- and out-stack sampling
- Highest measuring accuracy
- Available in stainless steel and titanium
- Compliant to EN 13284-1, VDI 2066, EN ISO 9096 and US-EPA Method 5

### Applications

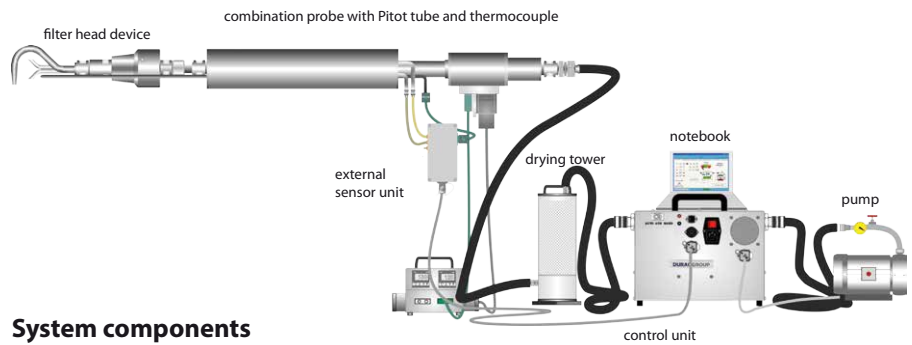
- Calibration of dust monitors
- Control measurements
- Measurements at filter plants

### Description

The D-RC 120 extracts isokinetically a partial gas stream from the measuring gas duct whereas the extraction is controlled fully automatically. The device can be conveniently operated via Windows software. The partial gas stream is sucked through a filter in which the contained dust is deposited.

The dust concentration is determined by weighing the filter before and after the extraction.

In parallel to the gas sampling, the measurements of the dust monitor under test can be recorded and averaged.



### System components

- D-RC 120 MD, consisting of control unit, pump, drying tower, external sensor unit, Windows software and accessories
- D-RC 120 FD filter head device, suitable for plane or tubular filters
- D-RC 120 P combination probe, heatable incl. gooseneck with nozzles

### Option

- Filter head device heater for out-stack sampling

Technical data	
measuring principle	gravimetric analysis
measuring result	dust concentration
sampling	In-stack, out-stack
measuring range	dust concentration: 0.1 ... 2000 mg/m <sup>3</sup>
	differential pressure: 0.01 ... 10 hPa
	absolute pressure: 400 ... 1300 hPa
	temperature: 0 ... 500 °C
	Sample volumetric flow rate: 0.5 ... 4 m <sup>3</sup> /h
Sample Gas	
- temperature	0 ... 500 °C
- velocity	2 ... 39 m/s
- pressure	-200 ... +20 hPa
- relative humidity	0 ... 95 % relative humidity, optional measurement in saturated gas below the dew point
Probe	
- length	1000 ... 3000 mm, others on request
- diameter	70 mm, quick release mounting for 3" port
- weight	1.5 kg + 5.4 kg / m
- probe material	stainless steel, optional titanium
Control unit	
- power supply	230 VAC, 50/60 Hz, optional 115 VAC, 50/60 Hz
- ambient temperature	-10 ... 60 °C
- protection	IP 33
- electrical interfaces	1x 12 V output for audible signal 1x 4 ... 20 mA input, e.g. for AMS 1x RS 485 with USB converter
- operation	operating software, requires netbook/notebook (not scope of delivery) with Windows 7 or Windows 8
- dimensions (h x w x d)	approx. 350 x 280 x 250 mm
- weight	approx. 8.5 kg