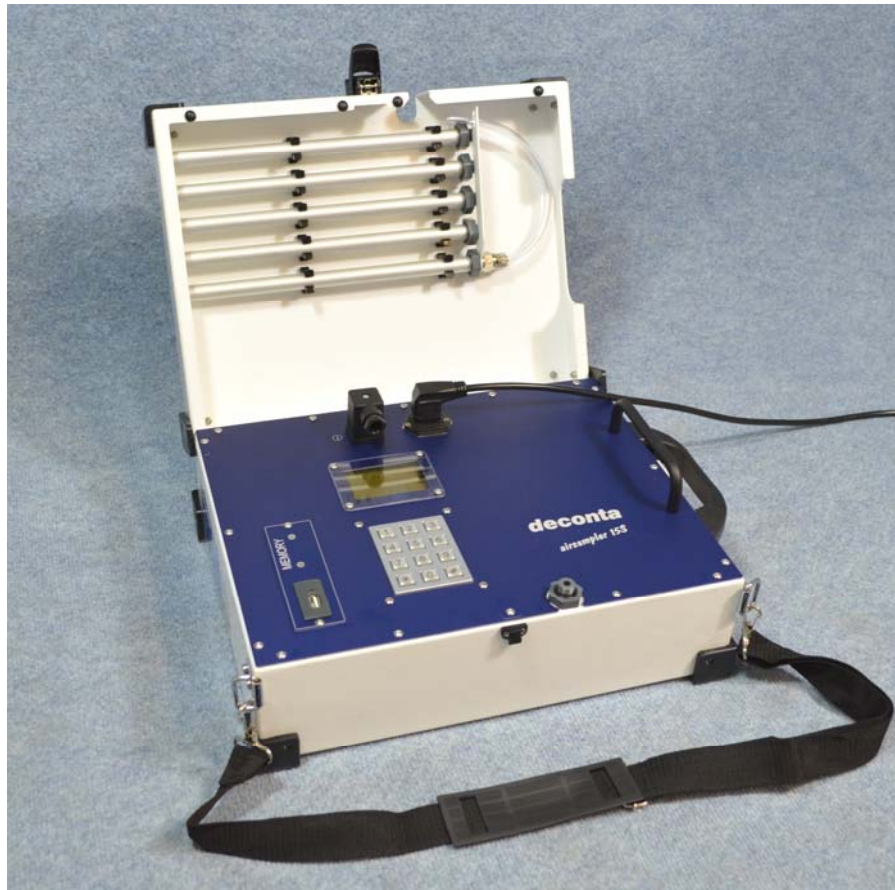


**Instruction manual**  
**Air sampling device**  
***airsampler 15 S / 30 S***



Manufacturer: deconta GmbH  
Im Geer 20, 46419 Isselburg

Description/Type-No.: airsampler 15 S           **Type 485**  
                                    airsampler 30 S           **Type 486**

Serial-No.: .....

---

## Table of contents

	on page
<b>1 Introduction</b>	<b>3</b>
<b>2 Basic safety advice</b>	<b>4</b>
<b>3 Transport</b>	<b>5</b>
3.1 Delivery	5
3.2 Transport	5
<b>4 Scope of delivery</b>	<b>5</b>
<b>5 Technical description</b>	<b>6</b>
<b>6 Technical data</b>	<b>7</b>
6.1 Pump power airsampler 15 S	7
6.2 Pump power airsampler 30 S	7
6.3 Technical data	7
<b>7 Initial operation</b>	<b>8</b>
<b>8 Display indications</b>	<b>9</b>
<b>9 Setting / Operation</b>	<b>10</b>
9.1 Possible settings / Code chart	11
<b>10 Optional expansion module</b>	<b>12</b>
10.1 Memory module	12
<b>11 Declaration of conformity</b>	<b>14</b>

---

## 1 Introduction

Dear customer,

Thank you for choosing a **deconta** product!

With this device you obtain a practical solution with simple operation, which was completed in a compact and functional way.

The **deconta** products guarantee:

- Stability, long life and serviceability on site
- Mechanics with „kick“
- Pleasing design

The copyright of this instruction manual remains with **deconta**. This manual is intended for assembly, operation and maintenance personnel. It contains instructions and drafts of technical nature which may neither be distributed nor used in any unauthorised way for competitive purposes or passed on to others.

**For more information, please visit our website [www.deconta.com](http://www.deconta.com)**

## 2 Basic safety advice

The handling of the appliance technology is only allowed for instructed staff. The exact knowledge of the instruction manual is an important condition for your staff in regard to the handling of the machine.

### 2.1 Intended use

As an operator, you are obliged by **deconta** to follow the instruction manual and to use this engineered technology equipment only in accordance with the regulations and its suitability! In the event of non-observance, **deconta** assumes no liability.

### 2.2 Operations

In order to ensure the safety during the operation of the device, you absolutely have to have to note the following:

- Do not place in an explosive area
- Necessary repairs, maintenance and cleaning, in particular in the field of electrical equipment has to be realized only by qualified staff
- The safety and protective equipment has to be kept in perfect functioning.
- The indicated safety instructions have to be kept in a readable state and have to be followed.

In order to ensure safety, any changes on the machine are prohibited.

#### **ATTENTION!**

**The device is not suitable for the use in a condensed, corrosive, flammable and explosive compartment air. The ambient and medium air temperature must be situated in a sector from -10 up to+50°C**

## **3 Transport**

### **3.1. Delivery**

Unless agreed otherwise, the lock system is packed completely and securely for transport by deconta. Transport damages have to be documented at once during the handing over of the carrier or another supplier. Please note the possible damages additionally on the way bill. To avoid damages caused by improper handling or carelessness, it is common practice to handle the Transport with care.

### **3.2 Transport**

In order to protect the device during the transport, it is located in a transport box with handle.

Care must be taken to ensure the device is not exposed to impacts or blows, because otherwise the function and safety of the device cannot be guaranteed.

## **4 Scope of delivery**

If no other agreements have been taken, the scope of delivery of an automatic phone announcement unit consists of:

- Device in a case with shoulder strap
- Pluggable measuring rod system/insertion adapter
- Power cable
- Instruction manual

## 5 Technical description

The appliance for air sampling air sampler is used to aspirate a defined volume flow through an air sampling filter. The filters are analysed in a laboratory

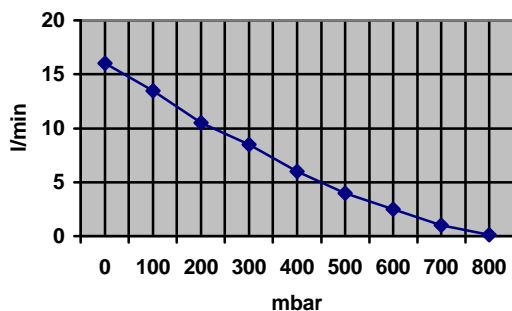
The permanent regulation of the volume flow, as well as calibrated sensors and a laminar element flow constitute the base for precise measurements. Measured are: Volume flow, temperature, relative humidity, absolute and barometric pressure. The time of measurement lost through power failure is re-established.

A dry contact enables the connection to an external alert giver or to a mobile phone. The contact switches according to the adjustment by exceeding of different parameters, by power failure or at the end of a measurement.

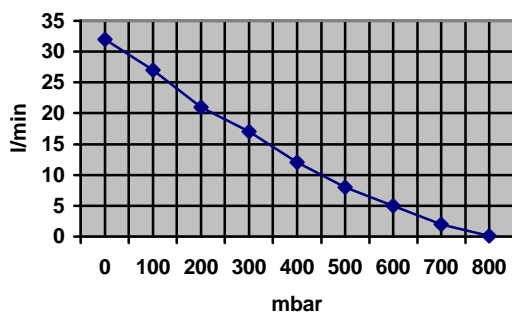
The combination between a simple operation and a high technical standard makes the airsampler a powerful measuring appliance, which fulfils by far all demands of the air measurement mobile or stationary.

## 6 Technical data

### 6.1 Pump power airsampler 15 S



### 6.2 Pump power airsampler 30 S



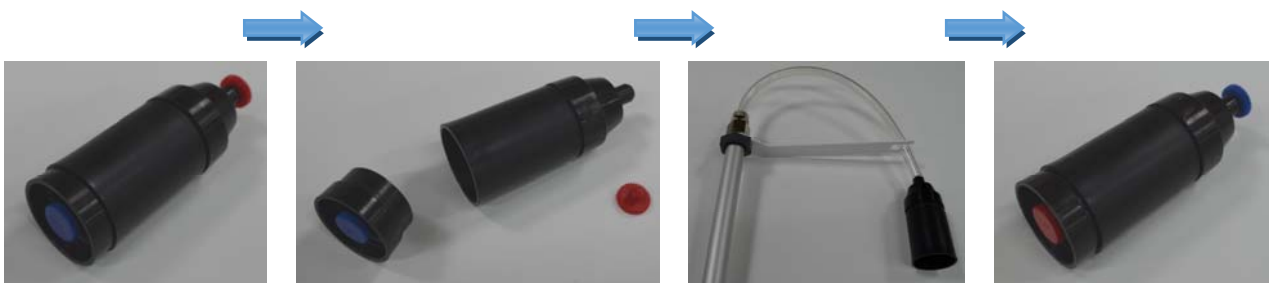
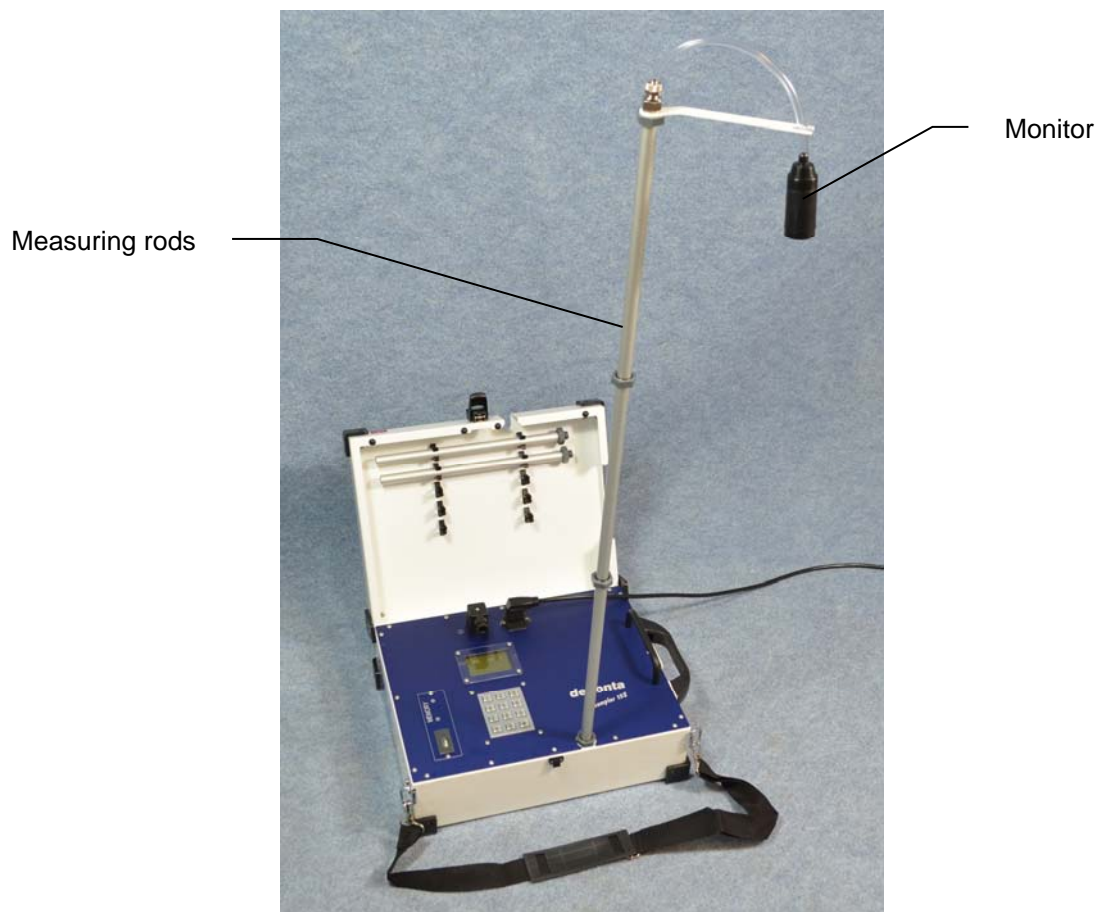
### 6.3 Technical data:

Length:	430 mm
Width:	325 mm
Height:	165 mm
Weight:	10,5 kg
Power connection:	230 V
Switched power:	Dry contact 230 V / 1,5 A
Measurement connections:	Rods with tube 8 x 1 mm
Volume flow 15 S:	2 - 15 l/min
Volume flow 30 S:	4 - 30 l/min
max. negative pressure:	500 mbar
Capacity of memory:	via optional module
Operation:	LCD- Display, keyboard
Temperature range:	0 – 45 °C

## 7 Initial operation

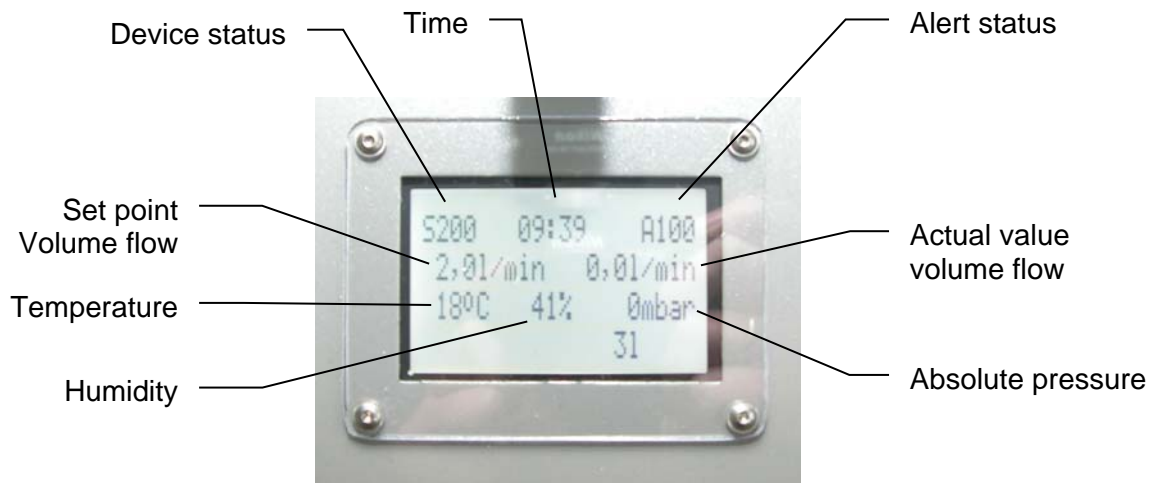
- Set up the device
- Put together the rods and insert them onto the airsampler port
- Connect the monitor
- Turn on the device

Now it is ready for use.





## 8 Display-Indications



After switching-on the device, 3 pieces of information appear on the upper line of the display:

- **Top row left** => Device status

Possible status indications (S followed by 3 numbers):

First digit 1	airsampler 15 S
First digit 2	airsampler 30 S
Second digit 2	Memory module present (optional)
Third digit	always 0, no function

- **Top row middle** => The actual time

- **Top row right** => Alert status

Possible alert status indications:

First digit 1	always 1, no function
Second digit 0	Device is inactive
Second digit 1	active with timing, lead time in progress
Second digit 2	active with timing, measuring time in progress
Second digit 3	active with timing, measuring time is expired
Second digit 4	active without timing
Third digit 0	no results
Third digit 1	Voltage drop
Third digit 2	Shut down pressure exceeded
Third digit 3	Over temperature
Third digit 4	Minimum pressure fallen short

Underneath the upper row, the measuring values for volume flow, temperature, humidity and absolute pressure are displayed

## 9 Settings / Operation



Adjustments are always carried out according to the same procedure via the keypad:

- Push the key # => C will appear on the display
- Enter the code for the relevant adjustment (see code chart below)
- Push the key # => The actual adjusted value is indicated
- Enter a new value
- Confirm the entry with the key #

### 9.1 Possible adjustments / Code chart

Code	Function	Value
5	Switch the device active / inactive	0 = inactive 1 = active with timing 2 = active without timing
10	Volume flow	2 – 15 l/min (airsampler 15 S) 4 – 30 l/min (airsampler 30 S)
11	Measuring time	5 to 5760 minutes
12	Lead time (Time-displaced start)	5 to 5760 minutes
20	Shut down pressure	50 to 500 mbar
21	Minimal pressure	0 to 100 mbar
40	Time hours	00 to 23
41	Time minutes	00 to 59
42	Date day	00 to 31
43	Date month	01 to 12
44	Date year	00 to 99
51	Storage interval every X minutes	1 to 240 minutes
52	Number of memory records to be transferred to USB memory stick	0 – 9998
53	Memory delete	0 = cancel 1 = delete

## 10 Optional expansion modules

### 10.1 Measuring data - memory module (From device software version 1.3)

The storage of measuring data (up to 90 000 records) with adjustable storage intervals. Export as txt file for further processing via USB memory stick. **The USB-Stick must be formatted as FAT or FAT32.** When the maximum storage capacity is reached, the oldest records are overwritten.

The content of the unedited txt file looks like this:

Measurement completed, marking by „†“

	Date	Time	Volume flow	Pressure	Temperature in °C	Humidity	Total volume flow	Measuring duration remainder
†	29.04.10	16:04	0 l/min	0 mbar	25 C	37 %	3840 l	0 min
	29.04.10	15:04	8,0 l/min	78 mbar	25 C	37 %	3360 l	60 min
	29.04.10	14:04	7,9 l/min	61 mbar	25 C	38 %	2880 l	120 min
	29.04.10	13:04	8,0 l/min	56 mbar	25 C	37 %	2400 l	180 min
	29.04.10	12:04	8,1 l/min	51 mbar	25 C	37 %	1922 l	240 min
	29.04.10	11:04	8,0 l/min	34 mbar	24 C	38 %	1440 l	300 min
	29.04.10	10:04	7,9 l/min	26 mbar	23 C	38 %	961 l	360 min
	29.04.10	09:04	8,0 l/min	18 mbar	23 C	37 %	482 l	420 min
	29.04.10	08:04	A120	C10 8,0	C11 480	C12 0	C20 256	C21 0
	29.04.10	07:43	A122					
	29.04.10	07:43	A120	C10 8,0	C11 480	C12 0	C20 256	C21 0

Alarm (see below 8  
Possible alarm status indicators)

Measurements settings  
(see below 9.1 code table)


The file containing the stored data can be edited freely using a text editor.

**Example:**

**Project:** Munich  
**Site management:** Mister Smith  
**Gauge:** airsampler 30 S type: 486 series: 87  
**Measurement period:** 29.04.2010 08:04 to 29.04.2010 16:04  
**Volume flow:** 8 l/min  
**Measurement time:** 480 minutes  
**Lead time:** 0 minutes  
**Cut-off pressure:** 256 mbar  
**Minimum pressure:** 0 mbar

†29.04.10 16:04	0 l/min	0 mbar	25 C	37 %	3840 l	0 min
29.04.10 15:04	8,0 l/min	78 mbar	25 C	37 %	3360 l	60 min
29.04.10 14:04	7,9 l/min	61 mbar	25 C	38 %	2880 l	120 min
29.04.10 13:04	8,0 l/min	56 mbar	25 C	37 %	2400 l	180 min
29.04.10 12:04	8,1 l/min	51 mbar	25 C	37 %	1922 l	240 min
29.04.10 11:04	8,0 l/min	34 mbar	24 C	38 %	1440 l	300 min
29.04.10 10:04	7,9 l/min	26 mbar	23 C	38 %	961 l	360 min
29.04.10 09:04	8,0 l/min	18 mbar	23 C	37 %	482 l	420 min
29.04.10 08:04	A120	C10 8,0	C11 480	C12 0	C20 256	C21 0
29.04.10 07:43	A122					
29.04.10 07:43	A120	C10 8,0	C11 480	C12 0	C20 256	C21 0

## 11 Declaration of conformity

EU Declaration of Conformity	
deconta GmbH Im Geer 20 D-46419 Isselburg	
<b>Product:</b> Negative pressure measuring device	<b>Type:</b> 485, 486
<b>The design of the units complies with the following directives:</b>	EU Machine directive 98/37/EWG EU Low-voltage directive 2006/95/EG EU Directive 89/336/EWG VDI 3492
<b>Applied harmonised standards:</b>	EN 60335-1
<b>Applied national standards:</b>	DIN VDE 0701, DIN VDE 0702
 A.Evers, Development director	Isselburg, 09.03.2009