

Data sheet

ACE X Breathalyzer



Description

The ACE X is an easy to use breathalyzer with electrochemical (fuel cell) premium sensor. The device measures the alcohol concentration in the breath and calculates the blood alcohol concentration. For this breathalyzer there is an ongoing approval process for the certificate EN 15964:2011, with this certificate the ACE X will meet all legal requirements for a breath alcohol tester for multiple use. With the EN 15964:2011 certificate, the ACE X will be approved for use as a pre-testing device during police traffic checks.

This device provides very reliable test results with a measurement tolerance of $\pm 0.05\%$ (per mil = g/L) at the reference value of 1.00 per mil and 25°C ambient temperature.

The measuring unit ‰ (per mill) = basic setting in the EU.

The measurement results determined in per mille are displayed as a 3-digit numerical value with 2 decimal places (in the measuring unit g/L and mg/L) and can be interpreted 1:1 (e.g. the display shows the value 0.36 = 0.36 per mille). Measured values in % BAC are displayed with 4 digits and 3 decimal places.

The electrochemical Premium Sensor integrated in the alcohol tester ACE X can be calibrated. To maintain the measuring accuracy of this device and the sensor warranty, we recommend regular calibration. You can send the device for calibration to the service address given at www.alkomat.net.

The instrument should only be used in accordance with the instructions in the user manual. All measured values obtained by this breathalyser are always for reference only and are not legally binding. Breath tests should be performed using clip-on mouthpieces (a new mouthpiece should be used for each test for reasons of hygiene and to avoid falsified readings).

Advantages

Thanks to its handy size and compact weight (only 130 grams including 2 AA batteries), the breathalyser ACE X is ideal for use in road traffic, but also for testing employees in public service (bus, train, tram) or for transport companies as a companion to events where alcohol is consumed. You can also use the device the morning after to determine your residual alcohol.

The intuitive design allows even inexperienced users to perform fast and precise measurements. The test is performed with a single button located at the front of the instrument and can be reached equally well by right- and left-handed users - it couldn't be easier!

Target groups

- Private individuals
- Inns, discos, bars etc.
- Companies, institutions, organizations and clubs in any form
- Schools (from secondary school to university and also driving schools)
- Social and assistance services (addiction counselling centres, humanitarian organisations)

Scope of Delivery

- 1 Digital ACE X Breathalyzer with premium fuel cell sensor
- 2 AA batteries (1.5 V, Alkaline, Duracell)
- 6 Mouthpieces
- 1 Hard case carrying bag
- 1 Quick start guide (in German & English)
- 1 Operating manual (multilingual)

Label of Individual Components



1. Mouthpiece and Mouthpiece Slot
2. Digital OLED Display (3 digits with unit ‰ and mg/L and 4 digits with unit % BAC)
3. Power Button
4. Air Outlet (always leave this part unblocked)
5. Battery Compartment Cover (on the back of the device)
6. Menu Button (for different device settings)

Technical data*

Sensor	Premium fuel cell sensor
Accuracy	+/- 0.05‰ (per mill) with reference to 1.00‰ at 25°C (‰ = default setting) OR +/- 0.005% BAC (Blood Alcohol Concentration) with reference to 0.100% BAC at 25°C OR +/- 0.025mg/L with reference to 0.50mg/L at 25°C
Detection Range	0.00 up to 5.00‰ (‰ = default setting) OR 0.000 up to 0.500% BAC (USA) OR 0.00 up to 2.50mg/L (UK)
Warm-up Time	Within 10 seconds at 0.5‰. This may vary depending on the value of per mill / BAC which was measured
Test memory	Stores the results of up to 100 tests (with test number, date and time)
Dimension	128 x 60 x 24mm (L x W x H)
Weight	130g (batteries included)
Power Supply	2 pcs. of 1.5V AA Alkaline batteries (power for up to 1,000 tests)
Working Temperature	-5°C to 40°C
Storage Temperature	-5°C to 40°C
Connectivity (only with optional BT)	Frequency range: 2402 to 2480 MHz Maximum transmission power: 1,6 dBm
Calibration	Default setting: After 12 months or 500 tests (whichever comes first). The settings can be changed (see chapter "Advanced Menu Settings"). Please observe the calibration instructions on the display. You can send the instrument for calibration to the service address given at www.alkomat.net .

*The technical data are subject to change without prior notice for functional improvements.