



# AlcoTrue® M Breathalyser

## Technical Specification

<b>Sensor type</b>	A318 Electrochemical sensor			
<b>Sampling systems</b>	High precision sampling system 0.2ml			
<b>Measurement modes</b>	Active mode (default) Fast mode (activated) Passive mode (activated) Mouth alcohol mode (if activated) Scanning mode (if activated)			
<b>Measurement range</b>				
Breath alcohol concentration (BrAC)	0.00	to 2.6 mg/l, 0 to 2600 µl, 0.000 to 0.550 g/210L, 0 to 260 µg/100mL, 0 to 260 µg%	(Ethanol mass per breath volume at 34°C and 1013 hPa.)	
Blood alcohol concentration (BAC)	0.00	to 5.50%, 0.000 to 0.550 %, 0.00 to 5.50 g/l 0 to 550 mg/100ml, 0 to 550 mg%, 0.00 to 5.50 mg/ml	(Ethanol mass per blood volume resp. mass at 20°C and 1013 hPa)	
This data is given using a conversion factor of 2100:1 between breath - and blood alcohol concentrations. Other conversion factors are available upon request.				
<b>Ambient conditions</b>				
For operations	-5 to 50°C (23 to 122°F), 10 to 100 % R.H., 600 to 1400 hPa			
For storage	-20 to 65°C (-4 to 149°F)			
<b>Sample conditions</b>				
Minimal acceptable flow	Adjustable upon request, 12 l/min (set as default)			
Minimal volume	Adjustable, 1.2L ( set as default)			
<b>Measurement accuracy</b>				
Reproducibility with ethanol standard	0 to 0.476 mg/l > 0.476 mg/l to 1 mg/l > 1 mg/l	0.008 mg/l 4% of measured value 8% of measured value	0 to 1%. > 1 %. to 2 %. > 2 %.	0.017 mg/l 4% of measured value 8% of measured value
<b>Sensitivity drift of measured value/month</b>	Typically 0.5%			
<b>Ready for operation</b>				
After switching on	< 6 seconds			
After completing a measurement in range (breath alcohol unit):	Typically 0.00 mg/l ≤ 2 seconds 0.25 mg/l ≤ 4 seconds 0.50 mg/l ≤ 6 seconds 1.00 mg/l ≤ 10 seconds >1.5 mg/l ≤ 15 seconds			
After completing a measurement in range (blood alcohol unit):	0.00%. ≤ 2 seconds 0.50%. ≤ 4 seconds 1.00%. ≤ 6 seconds 2.00%. ≤ 10 seconds >3.00%. ≤ 15 seconds			

**Calibration required**

Permissible calibration range for unit of measuring value:

	every 12 months
mg/l	0.145 to 0.750 mg/l
µg/l	145 to 750 µg/l
µg/l	0.035 to 0.150 g/210l
g/210l	14.5 to 75 µg/100ml
µg/100ml	14.5 to 75 µg%
µg%	0.35 to 1.50%.
%.	0.035 to 0.150%
%	0.35 to 1.50 g/l
g/l	35 to 150 mg/100ml
mg/100ml	35 to 150 mg%
mg%	0.35 to 1.50 mg/ml
mg/ml	

Standard calibration value:

mg/l	0.476 mg/l
µg/l	476 µg/l
g/210l	0.100 g/210l
µg/100ml	47.6 µg/100ml
µg%	47.6 µg%
%.	1.00%.
%	0.100 %
g/l	1.00 g/l
mg/100ml	100 mg/100ml

The use of these standard calibration values corresponds to a conversion factor of 2100:1 between breath and blood alcohol concentration values

**Units**

Available:

mg/l (set as default)  
%.

Upon request:

µg/l  
g/210l  
µg/100ml  
µg%  
%.  
%  
g/l  
mg/100ml  
mg%  
mg/ml  
P/A/F  
P/F

Available units can be selected by authorised personnel

**Dimensions (W x H x D)**

185 mm x 55 mm x 40 mm

**Weight**

240g (including Alkaline batteries)  
195g (including Li-Poly battery)

**Display**

Colour OLED, 256,000 colours

**Data memory**

Up to 9999 measurements

**Standards**

EN 60601-1:2005  
EN 55011:2007, EN61326-:2006  
preEN 15964:2010-11  
IEC 60068-2-6:2007, IEC 60068-2-27:2008,  
IEC 60068-2-64:2008, IEC 68-2-32:1975 +  
A1/A2:1980  
EN 60529:1991 +A1:2000

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Part Number: ???????  
Date: 12/12



BS EN ISO 9001:2008  
ISO 13485:2003