



## 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	0.008 mg/l	0 to 1‰.	0.017 mg/l
> 0.476 mg/l to 1 mg/l	4% of measured value	> 1 ‰. to 2 ‰.	4% of measured value
> 1 mg/l	8% of measured value	> 2 ‰.	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
	0.145 to 0.750 mg/l
mg/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

<b>Dimensions (W x H x D)</b>	185 mm x 55 mm x 40 mm
<b>Weight</b>	240g (including Alkaline batteries) 195g (including Li-Poly battery)
<b>Display</b>	Colour OLED, 256,000 colours
<b>Data memory</b>	Up to 9999 measurements
<b>Standards</b>	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

Distributed by:



**Viamed Limited** · 15 Station Road · Cross Hills  
Keighley · West Yorkshire · BD20 7DT · United Kingdom  
Tel: +44 (0)1535 634 542 Fax: +44 (0)1535 635 582  
Email: [info@viamed.co.uk](mailto:info@viamed.co.uk) Website: [www.viamed.co.uk](http://www.viamed.co.uk)



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BS EN ISO 9001:2008  
ISO 13485:2003