

# Micro<sup>+</sup> Smokerlyzer<sup>®</sup>



Advanced technology breath carbon monoxide (CO) monitor



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With the ability to analyse breath samples for adult and adolescents as well as automatic conversion to foetal %COHb, the Micro<sup>+</sup> is the most comprehensive breath CO monitor available.



scientific contributions to health  
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# Micro<sup>+</sup> Smokerlyzer<sup>®</sup>

Bedfont Scientific have long been established in the field of exhaled breath monitors for both medical and scientific markets.

Building on this success Bedfont has developed the Micro<sup>+</sup> Smokerlyzer, the most comprehensive breath carbon monoxide monitor currently available. It is predominately used in smoking cessation as a motivational tool to show damaging levels of CO and to chart progress through the quitting process.

The monitor is able to analyse breath samples for adults and adolescents as well as a custom profile for patients who are difficult to motivate. It has a one touch conversion to foetal %COHb for use with pregnant women. The colour touch screen makes the monitor simple to use and interpret. Results can be viewed in a table or graph and the monitor can hold up to ten patients' details and results, making it ideal for use with support groups and within clinic settings.

## Features

- Readings are available in COppm and %COHb which are instantly converted to foetal %COHb for use with pregnant women
- Adjustable breath-hold countdown timer for patients who are unable to hold their breath
- Adult, adolescent and custom profile settings are available
- Low sensitivity to hydrogen and alcohol ensures accurate results
- Anti-bacterial filter and one-way valve for increased infection control
- Built in maintenance reminders to ensure optimum test results

## Benefits

- Low cost, quick and reliable testing
- The only monitor needed for your entire CO testing needs
- Monitor shows instant results using red, amber and green traffic light system
- Easy to calibrate, even by non-technical staff
- Maximum reading held on display
- Monitor supplied complete with canvas carry bag for easy storage and transportation



## Calibration and Servicing

The Micro<sup>+</sup> Smokerlyzer monitor requires calibrating at least every six months. The Micro<sup>+</sup> will give a reminder when calibration is due during start-up of the monitor. Calibration is easy to achieve by non-technical staff and Bedfont's own calibration kits.

The Micro<sup>+</sup> must be calibrated with Bedfont 50ppm CO in air. This is available direct from Bedfont in a new Cali-bag which holds enough gas for one calibration, a 5 litre canister, 20 litre canister and 110 litre canister for approximately 3, 10 and 200 calibrations respectively. A range of annual service packages are also available.



### Technical Specification

Gas Detected:	Carbon monoxide (CO)
Concentration Range:	0-250ppm
Detection Principle:	Electrochemical sensor
Sensor Sensitivity:	1ppm
Accuracy (repeatability of readings):	±2%
Operating Temperature Range:	0-40°C (Storage 0 - 50°C)
Operating Pressure:	Atmospheric ±10%
Operating Humidity:	10–90% (Storage 0–95%) non-condensing
Hydrogen cross-sensitivity:	<±5%
Sensor Operating Life:	2-3 years, 6 month warranty
Sensor Drift:	<2% per month
Response Time:	Typically <20 seconds to 90% FSD
Display:	Fully integrated colour LCD with touch screen
Batteries:	3 x AA (LR6 or equivalent) alkaline batteries.
Weight:	Approx. 250g including batteries
Dimensions:	Approx. 44x77x138mm
Construction:	Case – Polycarbonate/ABS blend with elastomeric overmould. D-piece - Polypropylene
Indicator Levels:	Variable profiles
Breath hold:	Adjustable <sup>1</sup>

<sup>1</sup> Determining an individual's expired CO concentration requires the subject to inhale fully and hold his or her breath for a specified period of time to allow the CO levels in the alveolar air and the blood to equilibrate; R. J. West, The Effect of Duration of Breath-Holding on Expired Air Carbon Monoxide Concentration in Cigarette Smokers, Addictive Behaviours, Vol. 9, pp. 307-309

## scientific contributions to health

### Consumables

Bedfont Scientific supply a range of consumables to complement your Micro<sup>+</sup>. It is recommended that you use Bedfont consumables for optimum performance from your monitor.



### Flatpak Mouthpieces

The Flatpak mouthpiece has revolutionised the world of breath monitor mouthpieces. These mouthpieces take up less than a tenth of the space of normal cardboard mouthpieces. They are also packed in batches of 25 to reduce handling and the risk of cross-infection and are available in boxes of 50 or 250.

### D-pieces

The D-piece incorporates a one-way valve to prevent air being drawn back from the monitor. The breath then passes through an infection control filter, proven to remove and trap >99.9% of airborne bacteria<sup>2</sup>. This system further reduces the risks of cross infection and protects the instrument from contamination.

<sup>2</sup> Health Protection Agency (HPA), Porton Down, Report No 43/06, pp.10-11



### Instrument Cleansing Wipes

Bedfont provide instrument cleansing wipes for the instrument and external D-piece surfaces. Cleaning products containing alcohol should never be used, as they could affect the accuracy of the instrument. It is recommended that wipes are used for one surface only.

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