

# lung monitor BT Smart

Handheld device for remote Lung Function monitoring. Ideal for remote or in-clinic monitoring for primary or secondary care, or occupational health.

For chronic respiratory conditions such as COPD, cystic fibrosis, & post-transplant patients.



## Technical Specifications

<b>Product:</b>	Respiratory Monitor lung monitor BT Smart
<b>Model:</b>	4000
<b>Dimensions:</b>	109mm (length) x 63mm (width) x 42mm (height)
<b>Weight:</b>	63g (not including batteries)
<b>Flow Detection Principle:</b>	Stator/rotor
<b>Accuracy:</b>	Better than $\pm 3\%$ (FEV1, FEV), $\pm 10\%$ (PEF, FEF25-75)
<b>Back pressure:</b>	Less than 0.15kPa/L/second at 14L/s
<b>Measurement Range:</b>	PEF: 25 – 840 L/min BTPS FEF25-75: 25 – 840 L/min BTPS FEV1, FEV: 0 – 9.99 L BTPS
<b>Maximum test duration:</b>	10 seconds
<b>Power Supply:</b>	3V (2 x 1.5V AAA batteries)
<b>Expected Battery Life:</b>	3 months of use at 3 tests per day
<b>Expected Product Life:</b>	6 years.
<b>Operating temperature range:</b>	17–37°C
<b>Operating humidity range:</b>	30%–75%
<b>Ambient pressure range:</b>	850hPa–1060hPa
<b>Performance standards:</b>	ATS/ERS 2019, ISO 23747:2015, ISO 26782:2009
<b>Safety standards:</b>	EN 60601-1, EN 60601-1-11
<b>EMC Standards:</b>	EN 60601-1-2
<b>QA/GMP standards:</b>	EN ISO 13485, FDA 21 CFR 820, CMDR SOR/98-282, JPAL, MDSAP.
<b>Communications:</b>	Dual mode Bluetooth LE4.0 and 2.1
<b>Bluetooth Adaptor Requirements:</b>	USB2.0/3.0

## Comparison Table

	micro BT Smart	lung monitor BT Smart	lung monitor USB	lung monitor	asma-1
<b>Tests</b>					
VC	✓	✗	✗	✗	✗
FVC	✓	FEV*	✗	✗	✗
FEV1	✓	✓	✓	✓	✓
FEV6	✓	✓	✓	✓	✗
FEV1/FEV6	✓	✓	✓	✓	✗
FEV1/FVC	✓	FEV1/FEV*	✗	✗	✗
FEV 25-75	✓	✓	✓	✗	✗
FEV 0.5	✓	✗	✗	✗	✗
FEV 0.75	✓	✓	✗	✗	✗
PEF	✓	✓	✗	✗	✓
Post BD	✓	✗	✗	✗	✗
Total Parameters Available	8 (of 48)	8	4	3	2
<b>Quality Measures</b>					
Predicted Values	✓	✗	✗	✗	✗
Personal Best Zones	✗	✓	✓	✓	✓
Quality Prompts	✓	✓	✓	✓	✓
GLI	✓	✗	✗	✗	✗
<b>Data Exchange</b>					
Software Developers Kit (SDK) Connectivity	✓	✓	✓	✗	✗
<b>General Features</b>					
Touch Screen	✓	✗	✗	✗	✗
Colour Display	✓	✗	✗	✗	✗
Internal Battery	✓	✓	✓	✓	✓
Memory	750	600	200	200	600
<b>SDK Data Exchange Compatibility</b>					
Windows	✓	✓	✓	✗	✗
Android	✓	✓	✗	✗	✗
iOS	✓	✓	✗	✗	✗

\*FEV – Forced Expiratory Volume (up to 10 seconds). May be used as a surrogate for FVC.

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