

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

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

Comparison Table

	micro BT Smart	lung monitor BT Smart	lung monitor USB	lung monitor	asma-1
Tests					
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
Quality Measures					
Predicted Values	✓	✗	✗	✗	✗
Personal Best Zones	✗	✓	✓	✓	✓
Quality Prompts	✓	✓	✓	✓	✓
GLI	✓	✗	✗	✗	✗
Data Exchange					
Software Developers Kit (SDK) Connectivity	✓	✓	✓	✗	✗
General Features					
Touch Screen	✓	✗	✗	✗	✗
Colour Display	✓	✗	✗	✗	✗
Internal Battery	✓	✓	✓	✓	✓
Memory	750	600	200	200	600
SDK Data Exchange Compatibility					
Windows	✓	✓	✓	✗	✗
Android	✓	✓	✗	✗	✗
iOS	✓	✓	✗	✗	✗

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

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