

## Product /Comparison Matrix



Features	Pony FX	Spiropalm	MicroQuark	Quark Spiro	Quark PFT	Quark i2m
Type of product	Desktop	Hand-held	Hand-held	Lab	Lab	Lab
Flowmeter	Turbine/PNT	Turbine/PNT	Turbine	Turbine/PNT	Turbine/PNT	PNT
Type of Gas Exchange Analysis					Mix / BxB	
Gas Analysers					O <sub>2</sub> , CO <sub>2</sub> , CO, CH <sub>4</sub>	
PC Software	●	○	●	●	●	●
Power Supply	Ni-Mh battery AC/DC 100-240V	Li-Ion battery AC/DC 100-240V	by USB (5V)	AC/DC 100-240V	AC/DC 100-240V	AC/DC 100-240V
Printer	Thermal, PC or direct PCL	PC or direct PCL	PC	PC	PC	PC
PC/Printer Interface	USB/RS232	USB	USB	USB/RS-232	USB/RS-232	RS-232
Memory capacity	400-600 tests	600-1000 tests	PC limited	PC limited	PC limited	PC limited
Dimensions (cm/in)	20x23,8x7,6/ 7.8x9.4x3	18x7,5x3/7x3x1	50x4,5x53/ 38x11,4x13,4	33x41x16/ 12.9X16X6.2	33x41x16/ 12.9X16X6.2	33x20x16/ 12.9X7.2X6.2
Weight (kg/lb)	1,2/2.6	0,3/0.66	0,077/0.17	6/13.2	6/13.2	6/13.2

Tests	Pony FX	Spiropalm	Micro Quark	Quark Spiro	Quark PFT	Quark i2m
<b>Spirometry</b>	Forced/Slow Vital Capacity (SVC-FVC)	●	●	●	●	○
	Maximum Voluntary Ventilation (MVV)	●	●	●	●	○
	Bronchial Challenge Test	●	●	●	●	○
	Integrated Dosimeter				○	○
<b>Lung Volumes</b>	Multi-Breath Nitrogen Wash-out				○	
	Single-Breath 100% O <sub>2</sub> (Closing Volume)				○	
	Lung Volumes by DLCO Single Breath Dilution				○	
<b>Lung Diffusing Capacity</b>	DLCO Single Breath (w/ Breath Hold)				○	
	DLCO Single Breath (Intrabreath)				○	
	DLCO 3eq (3 equations method)				○	
	Membrane Diffusing Capacity				○	
<b>Respiratory Mechanics</b>	Maximum Exp-Insp Pressure (Mip-Mep)				○	
	Respiratory Drive (PO.1)				○	
	Airway Resistance (ROCC/Rint)	○			○	
	Forced Oscillation (FOT)				○	●
<b>Cardio Pulmonary Exercise Testing</b>	Pulmonary Gas Exchange (VO <sub>2</sub> , VCO <sub>2</sub> )				○	
	Integrated Pulse Oximeter (SPO <sub>2</sub> )	○	○		○	
	Indirect cardiac Output (Wasserman)				○	
	6 Minutes Walking Test (6MWT)		○		○	
	Anaerobic Threshold (AT)				○	
<b>Nutritional Assessment</b>					○	
<b>Stress Testing ECG</b>					○	

Notes: PNT: Pneumotach

● Standard ○ Option

## Product /Comparison Matrix



Features	Fitmate	Fitmate PRO	Fitmate MED	Quark RMR	Quark CPET	C12x / T12x	K4b <sup>2</sup>
Type of product	Desktop	Desktop	Desktop	Stationary	Stationary	12lead ECG	Mobile
Type of Gas Exchange Analysis	Mix	Mix	Mix	BxB	BxB		BxB
Gas Sensors	O <sub>2</sub>	O <sub>2</sub>	O <sub>2</sub>	O <sub>2</sub> , CO <sub>2</sub>	O <sub>2</sub> , CO <sub>2</sub>		O <sub>2</sub> , CO <sub>2</sub>
Printer	Thermal, PC	Thermal, PC	Thermal, PC	PC	PC	PC	PC
PC/Printer Interface	USB, RS-232	USB, RS-232	USB, RS-232	USB, RS-232	USB, RS-232	USB / Wireless	HF Tel, RS-232
Physical Mixing Chamber				○	○		○
Integrated Global Positioning System (GPS)							●
Automatic Control of Ergometers (bike, treadmills)		Direct	Direct		by PC	by PC	by PC

Tests	Fitmate	Fitmate PRO	Fitmate MED	Quark RMR	Quark CPET	C12x / T12x	K4b <sup>2</sup>
Spirometry	Forced/Slow Vital Capacity (SVC-FVC)		●	○	○		○
	Maximum Voluntary Ventilation (MVV)		●	○	○		○
	Bronchial Dilator Test		●	○	○		○
	Bronchial Challenge Test				○	○	
Cardiopulmonary Exercise Testing	Pulmonary Gas Exchange (VO <sub>2</sub> , VCO <sub>2</sub> )		VO <sub>2</sub>	VO <sub>2</sub>		●	●
	Anaerobic Threshold (AT)		●	●		●	●
	Fully Integrated Software (GAS/ECG)					○	○
	Indirect cardiac Output (Wasserman)			●		●	●
	Integrated Pulse Oximeter (SPO <sub>2</sub> )			○		○	○
	HR Interface w/ external ECG (TTL)		○	○	○	●	
Stress Testing ECG	12-lead Stress Testing ECG					●	
	Resting ECG interpretation					○	
	Arrhythmia analysis					●	
	Full disclosure ECG analysis					●	
	St segment, ST slopes, Trends					●	
	TTL Output (Export to CPET, Stress ECO)					●	
	Heart Rate Variability (HRV)					●	
Nutritional Assessment	Indirect Calorimetry (VO <sub>2</sub> , VCO <sub>2</sub> , RQ)	VO <sub>2</sub>	VO <sub>2</sub>	VO <sub>2</sub>	●	●	●
	Resting Energy Expenditure (REE, RMR)	●	●	●	●	●	●
	Indirect Calorimetry w/ Canopy Hood				●	○	
	Indirect Calorimetry w/ Ventilator (ICU)				○		
	Weight Management Program (Energy Balance)	●	●	●			
	Physical Activity Monitoring (from ver. 2.0, Q4 2008)	○	○	○			
	Weekly Meal Planner (from ver. 2.0, Q4 2008)	●	○	○			
Exercise Prescription	ACSM Exercise Prescription		●				
	VO <sub>2</sub> /HR Training Zones (based on AT)		●	●			
	Exercise Intensity for Cardiac Rehabilitation			●			
Fitness Assessment	Body Composition (skin-fold)	●	●	●			
	Muscular Endurance/Strength, Flexibility		●				
	Standardized Measurement (WHR, BP, RHR, etc)		●	●			
Cardio Vascular Risk Analysis	Framingham Index		●	●			
	Duke Score			●			
	Bode Index			●			
	European Cardio Score			●			

Notes: BXB: Breath by Breath | MIX: Dynamic Mixing Chamber | HF Tel: High Frequency Telemetry

● Standard ○ Option