









Product Comparison Matrix								
	Quark CPET	Quark RMR	K5	K4 b ²	Fitmate PRO	Fitmate MED	Fitmate GS	Fitmate
Technology								
Gas Sensors Technology								
Oxygen (O ₂)	●	●	●	●	●	●	●	●
Carbon Dioxide (CO ₂)	●	●	●	●				
Gas Sampling Technology								
Breath by breath (BxB)	●	●	●	●				
Dilution (Mixing Chamber)	○ (8,6 Liters)	○	○ (Micro DMC)		● (Micro DMC)	● (Micro DMC)	● (Micro DMC)	● (Micro DMC)
Tests								
Cardio Pulmonary Exercise Testing								
Pulmonary Gas Exchange (VO ₂ , VCO ₂)	●	○	●	●	VO ₂ only	VO ₂ only		
VO ₂ max	●	○	●	●	●	●		
Sub-max VO ₂	●	○	●	●	●	●		
Thresholds (AT, RCP)	2	○	2	2	1	1		
Heart Rate with HR belt	●	●	●	●	●	●		
Integrated 12-lead Stress test ECG	○	○	○	○		○		
Integrated Pulse Oximetry (SpO ₂)	○	○	○	○		○ (Rest only)		
ANT+ Profiles	1 (HR)	1 (HR)	5	N/A	1 (HR)	1 (HR)	○	○
Integrated GPS			10 Hz (Internal)	1 Hz (external)				
3D Motion sensors			Accelerometer, Gyro, Compass					
Ergometers Remote Control	PC/RS-232	○	PC	PC	RS-232	RS-232		
Default exercise protocols	31	○	31	31	31	31		
User defined protocols	Unlimited	○	Unlimited	Unlimited	1	1		
Ergometer Drivers	COSMED bikes and treadmills, h/p/cosmos, Monark, Woodway, Ergoline, Lode, etc.							
Indirect Calorimetry & Nutrition Assessment								
Resting Energy Expenditure (REE, RMR)	●	●	●	●	●	●	●	●
Substrates Analysis (RQ, %FAT, %PRO, %CHO)	●	●	●	●				
Indirect Calorimetry w/ ventilated patients (ICU)		○						
Indirect Calorimetry w/ canopy hood		●			○	○	●	○
Indirect Calorimetry w/ face mask	●	●	●	●	●	●	○	●
Indirect Calorimetry w/ mouthpieces-antibacterial filter	○	●	○	○	●	●	○	●
Weight Management Program (Energy Balance)					●	●	●	●
Physical Activity Monitoring (PAL classification)			●		w/ Lifecorder	w/ Lifecorder	w/ Lifecorder	w/ Lifecorder
Diet Planner					●	●	●	●
Spirometry								
Forced/Slow Vital Capacity (SVC/FVC)	○	○	○	○		●		
Maximum Voluntary Ventilation (MVV)	○	○	○	○		●		
Bronchial Challenge test	○	○	○	○		●		
Risk Analysis								
Framingham Index					●	●		
Duke Score, Bode Index, European Cardio Score						●		
Fitness Assessment								
Muscular Endurance/Strength/Flexibility					●			
Standardized Measurements (WHR, BP, RHR, etc)					●	●	●	●
Body composition by Skinfold (Formulas)					●	●	●	●
Exercise Prescription								
ACSM Exercise Prescription					●			
VO ₂ /HR Training Zones (based on AT)					●	●		
Recommended Exercise Intensity for Cardiac Rehab						●		