









Product Comparison Matrix

| |  |  |  |  |  |  |
|--|---|---|--|---|---|---|
| | Quark CPET | Quark RMR | K5 | Fitmate PRO | Fitmate MED | 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) |
| 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 | 1 | 1 | |
| Heart Rate with HR belt | ● | ● | ● | ● | ● | |
| Integrated 12-lead Stress test ECG | ○ | ○ | ○ | | ○ | |
| Integrated Pulse Oximetry (SpO ₂) | ○ | ○ | ○ | | ○ | |
| ANT+ Profiles | 1 (HR) | 1 (HR) | 5 | 1 (HR) | 1 (HR) | ○ |
| Integrated GPS | | | 10 Hz (Internal) | | | |
| 3D Motion sensors | | | Accelerometer | | | |
| Ergometers Remote Control | PC/RS-232 | ○ | PC | RS-232 | RS-232 | |
| Default exercise protocols | ● | ○ | ● | ● | ● | |
| User defined protocols | 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) | | | | ● | ● | ● |
| PAL classification | | | | ● | ● | ● |
| 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 | | | | | ● | |