

activPALTM

PROFESSIONAL
Physical Activity Logging



Technical Specification

Physical Characteristics

Size	35mm x 53mm x 7mm
Weight	20g
Attachment	PALstickies TM hydrogel adhesive pad
Recording period	> 8 days
Battery	3v Li-polymer rechargeable (not user serviceable)
Battery recharge period	2 hours (from full discharge)
Case protection	Splash proof, IP52
Shock	1m drop
Temperature (storage)	-20 - 60°C, 95% humidity
Temperature (operating)	-5 - 40°C, 95% humidity
Docking station	USB charging and data transfer (4 charging ports plus a combined charge and data transfer port)

Sensor Characteristics

Sensor	Piezoresistive accelerometer
Range	> 2g
Resolution	8 bit
Sampling frequency	10Hz
Recording interval	0.1s

Output Parameters

Sedentary time	Time spent sitting and lying (resolution 1s)
Upright time	Time spent upright (resolution 1s)
Stepping time	Time spent stepping by cadence (resolution 1s)
Steps	Steps taken (accuracy > 99%)
Stepping cadence	Step interval (steps per minute, resolution 1 step/minute)
Sit to Stand movements	Number of posture changes from sedentary to upright
Energy expenditure	Derived from activity parameters (MET.hours, Physical activity level (PAL), kCal)
Activity duration analysis	Activities (sedentary, upright, quiet standing, stepping) can be analysed by duration and frequency

PC requirements

Operating system	Windows XP, 2000, Me, 98
Communications port	USB
Transfer rate	115200bps

