

### About us

McRoberts is an innovative and flexible organization with 25 years of experience, and one of the leaders in ambulatory monitoring of physical activity. We apply our knowledge of human movement and analysis of raw data to facilitate simple solutions in healthcare, pharmacy and research for evaluating physical functioning.

Founder and managing director of McRoberts is **Rob van Lummel**. His interest in the combination of movement, technology and ICT resulted in the foundation of McRoberts in 1988. In cooperation with scientific partners, epochmaking work has been realized in the development of ambulatory monitoring of physical activity. His wife, **Corinne Meurs**, who has been an active physiotherapist, joined the company in 2006

### Get in touch

#### **Customer service**

If you have any support related questions please contact us at: Email: <u>support@mcroberts.nl</u>

### Sales

If you'd like more information about our products please contact us at: Email: <u>sales@mcroberts.nl</u>

### Administrative

If you have any questions regarding your invoice or other administrative questions please contact us at: Email: <u>info@mcroberts.nl</u>

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# **mcr:berts** DynaPort MoveTest®

Ambulatory assessment of human movement under controlled conditions.

In clinical practice, clinical trials and research



### **MoveTest**

With the MoveTest you will be able to do short physical performance tests using one single device to be attached around the waist of the subject. Dedicated software will assist you in efficiently performing a pre-defined test protocol. The MoveTest consists of a hardware unit, managing software, and one or more chosen modules, accessible through our web service.



#### 6 standardized tests

Temporal and kinematic outcomes

- Remotely controlled
- Customized test protocols
- FDA and EMA approved medical device
- Platform for multi-center studies
- Graphical and Database output
- Cloud-based analysis and storage of data
- Conform ISO-13485



## Six Performance Tests

### Gait Test

The gait test is a component of the SPPB, however the analyses of only a certain amount of straight walking can be of important on its own as well. With the DynaPort MT the walk pattern during a certain amount of walking can be analvzed.

### Sway Test

The traditional way of evaluating a person's balance is by estimating the displacement of the center of pressure (COP), which is acquired with a force platform. Force/pressure platforms use the ground reaction force of the subject to calculate COP displacement which is then used to evaluate Center of Mass (CoM) movements. With the MoveTest body sway module COM accelerations and angular velocities can be measured directly and in any location.

### Sit to Stand Test

The Sit-to-Stand assessment is widely used for evaluating a person's ability to stand up from a chair. Traditionally, the time needed for 5 repeated chair rises is the only parameter that is measured. However, research with force plates and camera systems has shown that a qualitative evaluation based on kinematic movement parameters can yield many new insights. McRoberts' Sit to Stand analysis enables you to obtain such a qualitative evaluation unobtrusively.

### Short Physical Performance Battery

Short Physical Performance Battery The Short Physical Performance Battery (SPPB) is a well-known and sensitive performance test which combines the results 3 balance tests, a gait speed test and a chair stand test into one score. Hand-clocked durations are used to indicate the performance capacity for individual components which are scaled to a grade between 0 and 4 and add up to a score between 0 and 12. The DynaPort MT is remotely controlled and can therefore be used to automatically calculate the scores. However, the separate components can also be qualitatively analysed with the other MoveTest modules.

### Timed Up & Go Test

The Timed Up & Go (TUG) consists of a sequence of activities of daily living, namely rising from a chair (Sit-To-Stand), gait initiation, walking, turning and sitting down on a chair (Stand-To-Sit).Traditionally, hand-clocked time is administered when assessing the TUG. With the DynaPort MT the individual components of the TUG and the trunk kinematics can be measured separately, so also movement quality can be evalueated. McRoberts' TUG analysis enables you to obtain such a qualitative evaluation unobtrusively.

### The Six-Minute Walk Test

The six-minute walk test (6MWT) measures the  $\Lambda$  distance an individual is able to walk over a total of six minutes on a hard, flat surface. The goal is for the individual to walk as far as possible in six minutes. The individual is allowed to self-pace and rest as needed as they traverse back and forth along a marked walkway. Instead of only looking at the total distance walked, with the DynaPort MT the total walk pattern during the six minutes walking can be analysed.

#### General 106.6 x 58 x 11.5mm Dimensions Weight 55 grams Maximum 1 day (with Bluetooth on) measurement duration

Storage medium

Bluetooth® connectivity

1 Gb Flash memory