

MOOVER GAIT

TECHNICAL SPECIFICATIONS







inertial sensors network

Moover Gait is the ideal tool for clinicians and specialists interested in objectively monitoring and quantifying the patient's physical state and evaluating the effectiveness of a rehabilitation program.

Thanks to the network of inertial sensors worn by the patient, it provides a complete and accurate movement analysis. By applying 7 small wireless inertial sensors on the lower part of the body (pelvis, thigh, tibia and foot) with a quick coupling and release system it is possible to acquire the walk in a straight line or on a treadmill displaying real-time data on freeStep. Possibility to acquire the video of the walk synchronized with the 3D analysis with both the 7 and 16 sensors setups.

WEARABLE

Wireless, non-invasive, without external infrastructures.

ACCURATE

Validated with gold-standard optoelectronic systems

INNOVATIVE

Real-time 3D viewing and video synchronization.



CE FDA MD NMPA

MOOVER GAIT Analysis parameters

GAIT CYCLE SYMMETRY INDICES

- Half Step duration Step duration
- Stance Phase duration Swing Duration
- · Single Support Duration · Double Support duration
- · Shock Impact foot

SPACE-TIME INDICES

- · Speed · Half Step duration · Step duration
- · Stance Phase duration · Swing Duration
- · Half Step length · Step length
- · Shock Impact tibia · Shock Impact foot
- · Arm swing velocity and Arm range of motion
- · Report Printouts

ANIMATIONS

- · Generation of 3D animation files · BVH export
- · Movement reproduction · Slow motion function

3D JOINT ANGLES

PELVIS: Pelvic Tilt, Pelvic Drop, Pelvic Transverse Rotation HIP: Abduction/Adduction, Flexion/Extension, Internal/External Rotation KNEE: Abduction/Adduction, Flexion/Extension, Internal/External Rotation ANKLE: Inversion/Eversion, Flexion/Extension, Internal/ External Rotation SHOULDER: Flexion/Extension NECK: Flexion/Extension, Rotation, Lateral Bending TRUNK: Obliquity, Tilt, Rotation

COORDINATION INDICES

TRUNK-PELVIS: Coordination index ARM-HIP: Coordination index Trunk and Pelvis dynamic stabilometry

· Half Step length · Step length · Shock Impact tibia

· Single Support Duration · Double Support duration