

MOTUS 4D

FACTS

MOTUS4D is a body scanning system that captures the 3D body surface in movement with a ultra-high speed rate (90-180 frames per second).

The processing software automatically provides continuous, watertight & intra-frame homologous meshes, including the rigging skeleton.

ULTRA FAST 4D SCANNER

MOTUS4D is the new generation of 3D body scanning devices to boost the research of the body shape in movement, and will be a revolution in the field of biomechanics and motion capture.



The **Instituto de Biomecánica de Valencia** (IBV) has joined two research teams specialised in biomechanics of human movement and 3D body anthropometry to develop this unique laboratory.

The high resolution capture of the external surface of the body will enable the non-invasive study of internal structures for medical applications and sport performance. In the field of human body modelling, **MOTUS4D** is a strategic tool to enhance accuracy and realism of current digital human models for dynamic simulations and animation.

SPECS

Accuracy

High resolution mode (1mm) / Medium resolution mode (2mm)

High speed 3D capture

90fps at high resolution / 180fps at medium resolution

Scan Time

1ms per frame

External Synchronization

Trigger input, synchro input and synchro output

Footprint

5.5m x 5.5m (configuration of 12 modules)

Configuration

From 12 to 23 modules

Subject Capture

Simultaneous depth and texture acquisition

Processing Capture

Continuous, watertight and homologous mesh per frame including a rigging skeleton

Automatic calculation of 95 digital body measurements in standing canonical posture (ISO7250 - ISO 8559)

Eye-Safe

Optic based technology

<https://anthropometry.ibv.org>

