

# CAPTIV Motion

Wireless Sensors and Measurements



***Wireless Measurement of 3D Motion***

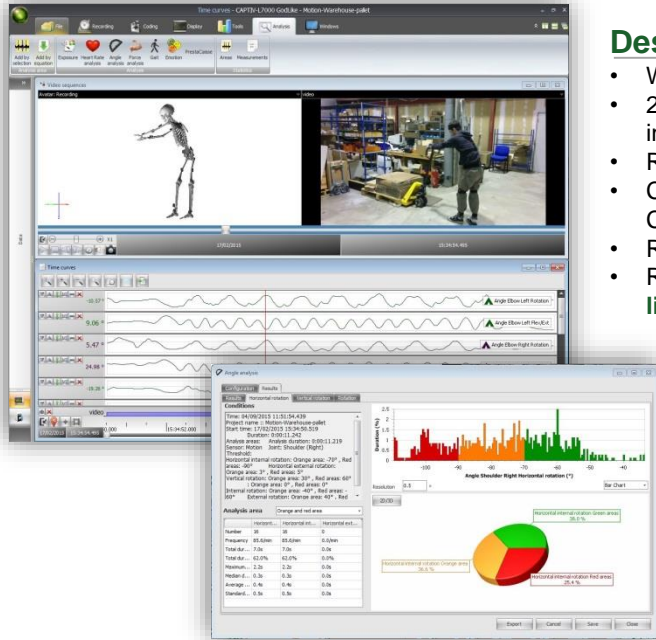
***Real time via long-range wireless Receiver***

***Datalogger for tetherless Recording with no distance limitation***

# CAPTIV Motion

In cooperation with 

## Wireless Sensors and Measurements – 3D Motion



### Description

- Wireless sensors with easy and unobtrusive fixation system,
- 2 sensors for measuring one angle/joint, 15 sensors for full body, any intermediary configuration possible,
- Raw data available as a rotation quaternion,
- Conversion in angles, angular speed and angular acceleration with CAPTIV-L7000 Premier software,
- Real-time data transfer to PC via T-REC wireless receivers,
- Recording with T-Log Datalogger for mobile measurements with **no limitation of range or distance.**

### Technology

T-Sens Motion sensors integrate a 3-axis accelerometer, a 3-axis gyroscope and a 3-axis magnetometer with powerful fusion algorithms.

Measurements are **extremely robust over time** against vibrations, perturbations of magnetic field and challenging environments.

The CAPTIV-L7000 Premier software enables accurate display and analysis of human body motion (angles on joints, angular speed and angular acceleration) with multiple analysis and reporting capabilities.

## A wireless system with no equivalent

- Real time to PC or portable datalogger,
- Fully modular from 2 to 15 sensors,
- Unchallenged robustness to perturbations,
- Raw data available (quaternions),
- Adjustable sampling rate,
- Synchronization with :
  - multiple videos
  - many other wireless physiological measurements (EMG, EKG, ECG, Force, temperature, etc...)
  - Eye-Tracking systems...

## Applications

- Motion Analysis
- Ergonomics
- Biomechanics
- Prevention
- Research
- Sports
- VR
- other...



## Specifications

### Sensor characteristics

Number of channels	4 (Quaternion)
Calibration	Rest position
Sampling rate	32 / 64 / 128 Hz (adjustable)
Precision Head / Pitch, Roll	3° / 0.5°
Gyroscope	+/- 2000°/s
Accelerometer	+/- 16g
Magnetometer	+/- 2.5 gauss

### Electrical characteristics

Power	Li-ion 300mAh
Battery life	4h
Charging time	3h

### Mechanical characteristics

Size	60mm x 35mm x 15mm
Weight	30g

### Operating conditions

Temperature	0°C to 40°C
Humidity	<60%
Shock resistance	2000G