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

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CAPTIV Motion
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.

**Specifications**

<table>
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<th>Sensor characteristics</th>
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<td>Number of channels</td>
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<td>Calibration</td>
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<tr>
<td>Sampling rate</td>
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<tr>
<td>Precision Head / Pitch / Roll</td>
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<td>Gyroscope</td>
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<tr>
<td>Accelerometer</td>
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<td>Magnetometer</td>
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**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

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…