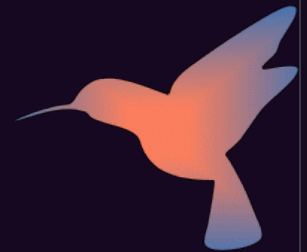

Colibri - Inertial Motion Tracker

Technical Specifications



HOW IT
WORKS:



Software by DFKI

5DOF
example

This site requires Flash. Click on the picture below to download the Adobe Flash Player.



GENERAL DESCRIPTION

The Colibri is an universal 3DOF Inertial Measurement Unit (IMU) with very low power consumption, USB interface and both machine and human friendly interfaces. It carries 3-axis state-of-art sensors to measure acceleration, angular rate and magnetic field. Built-in temperature sensor helps to eliminate temperature influences on sensors. Colibri can output both raw sensor data and calibrated floating-point data. You may enable/disable data from any sensor and change frequency from 10 to more than 100 Hz. The supplied API for Windows and Linux implements extended Kalman filter for orientation tracking. Using it you will simply get orientation data in Euler angles or quaternion form. Colibri comes in a robust, high-precision aluminum case.

APPLICATIONS

- Gaming and virtual reality input devices
- Motion control with man-machine interface
- Personal navigation devices
- Appliances and robotics
- Rehabilitation

FEATURES

- 3-axis MEMS accelerometer
- 3-axis MEMS gyroscope
- 3-axis MI (magneto-inductive) magnetic sensor
- Temperature sensor
- Waterproof

Accelerometer: Scale: $\pm 16g$ | Resolution: 13-bit

Gyroscope: Scale: $\pm 1500^\circ/s$ | Resolution: 13-bit

Magnetic sensor: Scale: $\pm 1100\mu T$ | Resolution: from $0.0263\mu T$ (10Hz) to $0.8421\mu T$ (250Hz)

Working frequency: 100 Hz

Orientation accuracy: Pitch/roll: 0.5° | Yaw: 1°

Temperature sensor: Accuracy: $\pm 0.5^\circ C$ | Range: $0^\circ C$ to $+70^\circ C$

Power consumption: 5V 40mA max (from USB)

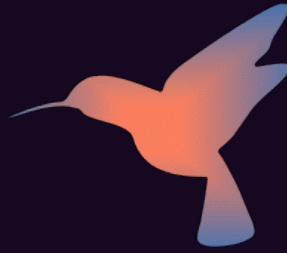
PC connection: 2m USB cable (or up to 5m custom length)

Weight: 22g (without cable)

Dimensions (W/H/D): 30mm/13mm/30mm

DOWNLOAD SOFTWARE

Download 32bit Software for Colibri Motion Tracker
incl. User Manual, SDK and code samples
(Microsoft Windows® XP, Vista, Win7)



Further Info: Flyer, User Manual

Linux Software: GUI+SDK (Fedora), GUI+SDK (Ubuntu32), GUI+SDK (Ubuntu64)

Mouse Driver: Mouse-Driver (Windows 32)



to read
Manual

Subject to technical modifications

Trivisio Prototyping GmbH
Karcherstrasse 10
67655 Kaiserslautern
Germany

tel: +49-631-4125111
fax: +49-631-4126127

mixed.reality@trivisio.com
