

APPLICATIONS

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

FEATURES

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

Low power consumption
 USB interface (Virtual COM-port)
 Both machine and human friendly interfaces

Software API for Windows and Linux representing
 extended Kalman filter for the orientation tracking

Robust, high-precision aluminum case

SPECIFICATIONS

Accelerometer

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

Gyroscope

Scale: $\pm 300^\circ/s$
 Resolution: 10-bit
 ($\pm 1500^\circ/s$, 13-bit coming soon)

Magnetic sensor

Scale: $\pm 1100\mu T$
 Resolution: from $0.0263\mu T$ (37Hz) to
 $3.3681\mu T$ (4700Hz)

Temperature sensor

Accuracy: $\pm 0.5^\circ C$
 over a $0^\circ C$ to $+70^\circ C$ range

Working frequency

100 Hz

Power consumption

5V from USB
 50mA max

Dimensions

30x30x14mm

Weight

18 grams

PC connection

micro-USB



GENERAL DESCRIPTION

Colibri is the Inertial Measurement Unit (IMU). 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 other 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.

Supplied API for Windows and Linux implements orientation tracker. Using it you will simply get orientation data in Euler angles or quaternion form.