

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, waterproof, high-precision aluminum case

SPECIFICATIONS

Accelerometer

- Scale: ± 16 g
- Resolution: 13-bit

Gyroscope

- Scale: ± 1500 °/s
- Resolution: 13-bit

Magnetic sensor

- Scale: ± 1100 μ T
- Resolution: from 0.0263 μ T (10 Hz) to 0.8421 μ T (250 Hz)

Temperature sensor

- Accuracy: ± 0.5 °C
- over a 0 °C to +70 °C range

Working frequency

- 100 Hz

Orientation accuracy:

- Pitch/roll: 0.5 °
- Yaw: 1 °

Power consumption

- 5 V from USB
- 40 mA

PC connection

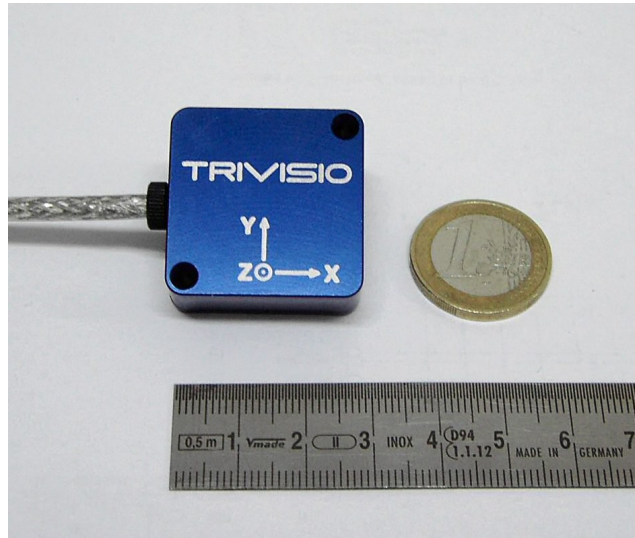
- 2 meters (or up to 5 meters custom length)
- USB cable

Dimensions

- 30 x 30 x 13 mm

Weight

- 22 grams (without cable)



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.