

COLIBRI-Wireless



FEATURES

Two 3-axis MEMS accelerometers with redundancy z-axis
3-axis MEMS gyroscope
3-axis AMR (magneto resistive) magnetic sensor
Temperature sensor

2.4 GHz band operation
10 meters working distance
10 hours 570mAh Li-Po battery
micro-USB charging
Up to 10 trackers **synchronized** in the wireless network

USB-dongle (receiver), with USB interface (Virtual COM-port) and synchronization IN/OUT

Auxiliary digital and analog inputs (e.g. for OEMs to implement joystick)

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

High-precision aluminum base plate

SPECIFICATIONS

Accelerometer

Scale: ± 16 g and ± 6 g
Resolution: 13-bit

Gyroscope

Scale: ± 1500 °/s
Resolution: 13-bit

Magnetic sensor

Scale: ± 400 μ T
Resolution: 12-bit

Temperature sensor

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

GENERAL DESCRIPTION

Colibri-Wireless 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 sensors.

Lower range higher precision accelerometer may be optionally added for certain applications.

Up to 10 Colibri-Wireless can be connected in the **synchronous** network to the single USB-dongle (receiver).

Sampling frequency is 100 Hz for every tracker.

Supplied API for Windows and Linux implements orientation tracker.



Working frequency:
100 Hz

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

Power consumption:
3.7 V Li-Po battery 570mAh
55 mA

Dimensions: 56x42x19mm
Weight: 60 gram