10 DOF Mems IMU Sensor

Product Code: SEN0140
Supplier: DFRobot

Introduction
At the beginning,the inertial measurement unit is an electronic device that measures and reports on a craft's velocity, orientation, and gravitational forces, using a combination of accelerometers,gyroscopes, and magnetometers. Now IMUs are commonly used in the Human-computer interaction(HCI), navigational purposes and balancing technology used in the Segway Personal Transporter as we all known.

The 10 DOF(degrees of the freedom) sensor is a compact and low cost IMU from DFRobot. It integrates the ADXL345 accelerometer, the HMC5883L magnetometer,the ITG-3205 gyro and the BMP085 barometric pressure sensor. It's suitable for most of the controlling system because of the small dimension. The mounting holes make it possible to provide the highly accurate and stable sensor data.It embeds a low noise LDO regulator for supplying a wide range power input.Works with 3~8 volts power input.Certainly,the 10 DOF sensor is directly compatible with your Arduino boards.

Applications
- Aircraft
- Balancing robots
- Indoor inertial navigation
- Altimeter
- Human–computer Interaction (HCI)

Specification
- Wide power input range from 3 to 8 volts
- Low noise LDO regulator
- Low cost IMU
- Interface: I2C
- M3x2 holes for easily mounted on your mobile platforms,robots,HCI or UAVs
- LED power indication
- Integrate 10 dof sensors
    - Adxl345 accelerometer
    - ITG3200 gyro
    - HMC5883L Compass
    - BMP085 pressure sensor
- Compact size design and easy-to-use
- Compatible with Arduino controllers
- Electricity gold PCB
- Size: 26x18mm