**Tri-Axis Inertial Measurement Unit (6DoF sensors)**

**APPLICATIONS**

- **Factory/Production Site**
  - **Robot Arm Control**
    Detects amount of deflection (position)/velocity of a robot end effector and automatically adjusts each mechanism (such as load, route of the robot arm, etc.) at the time of setup.
  - **Positioning Tool for Torque Wrench**
    Location logging capability for torque wrench using IMU technology.
  - **Detection of Abnormal Vibration of Machine Tools**
    Gyro can suppress abnormal micro-vibration more effectively than accelerometers, because the vibration of materials cut by machine tools is often accompanied by rotational motion.
  - **Overhead Traveling Cranes**
    Optimally controls deflection angle of a crane hook (X/Y axis direction) caused by traveling and traversing of the crane, by detecting its angular velocity and acceleration.

- **Medical/Nursing Care**
  - **Monitoring Human Movement**
    Wireless measurement of movement improves patient experience.

- **Construction/Engineering**
  - **Measurement of Inclination of Construction Machinery**
    Capable of measuring inclination of a construction machine like a bulldozer accurately, even if it is vibrating, because the inclination is measured by both accelerometer and gyro sensors.

- **Security/Safety devices**
  - **Attitude Control of Monitoring Cameras**
    IMU is used for attitude control of monitoring cameras mounted or installed in various applications including aerial, bodies of water and dams.

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Tri-Axis Inertial Measurement Unit equipped with Piezoelectric Angular Rate Sensor. High precision, compact and more affordable price than conventional inertial measurement mechanisms.