

Six-Axis Force and Torque Sensor

Six-axis force and torque sensors measure forces and moments along three orthogonal axes. Commonly used in robotics and automation, these sensors provide simultaneous measurement of forces (F_x , F_y , F_z) and torques (M_x , M_y , M_z) for comprehensive load analysis.



Overview

Precision Force and Torque Sensing

This high-performance six-axis sensor is engineered for precise measurement of forces and moments across three orthogonal axes. Designed for demanding applications in robotics, automation, and research, it delivers simultaneous data for forces (F_x , F_y , F_z) and torques (M_x , M_y , M_z). Built with high-stiffness materials and advanced strain gauge technology, it ensures reliable load analysis and integrates seamlessly with standard data acquisition systems.

Technical Specifications

Measurement Axes

- Force X (F_x)
- Force Y (F_y)
- Force Z (F_z)
- Torque X (M_x)
- Torque Y (M_y)
- Torque Z (M_z)

Technology

Strain Gauge, High-Stiffness Construction

Connectivity

Interface Options

Analog Output • Digital Communication

Applications

Primary Use Cases

- Robotics
- Industrial Automation
- Scientific Research
- Load Analysis