

QNET Mechatronics Actuator board



The QNET Mechatronic Actuators board is an ideal tool to introduce hands-on a variety of actuators, and demonstrate their advantages, interfacing and operation, as well as design considerations and limitations. This application board has been developed for education to facilitate hands-on, active learning of the common types of actuators used in mechatronic systems.

You can use this device to teach electromagnetics actuation, brushed DC motors, principles of stepper motors, hobby servos, and other key areas.

The QNET Mechatronic Actuators board consists of

- >> Solenoidused to couple the two brushed DC motors.
- >>> Brushless DC stepper motor and servo motor are driven by a PWM amplifier.
- >> Two brushed DC motors motor commanded through a linear power amplifier, the other is commanded by a PWM amplifier.
- >>> Unipolar stepper motor
- >> Servo motor.
- >> Separate photomicrosensors for each motor
- >>> Built-in PWM and linear amplifiers
- >>> Visualization of internal actuator mechanisms animated by hardware motion
- >>> Built-in PCI connector for NI ELVIS II /ELVIS II + for quick and easy lab setup
- >> Fully compatible with LabVIEW
- >>> Fully documented system models and parameters provided for LabVIEW
- >> Comprehensive digital course resources