

Elu2-Arm

The Elumotion Elu2-Arm has been specifically designed to support experiments investigating human-robot co-operation. Humanlike form and movement are important whilst data from the sensors within the arm may provide the researcher rich information about the dynamics of interaction.

Each Elumotion Elu2-Arm can be configured as either a left or right arm.

The joints of the robot arm simulate the following anatomical movements:

1. Shoulder flexion - extension

Range Of Movement - 300°
Max Torque - 35Nm
Max speed per second - 150°

2. Shoulder adduction-abduction

Range Of Movement - 108°
Max Torque - 35Nm
Max speed per second - 150°

3. Humeral -rotation

Range Of Movement - 180°
Max Torque - 18Nm
Max speed per second - 185°

4. Elbow flexion - extension

Range Of Movement - 120°
Max Torque - 18Nm
Max speed per second - 185°

5. Wrist pronation - supination

Range Of Movement - 180°
Max Torque - 3Nm
Max speed per second - 185°

6. Wrist adduction - abduction

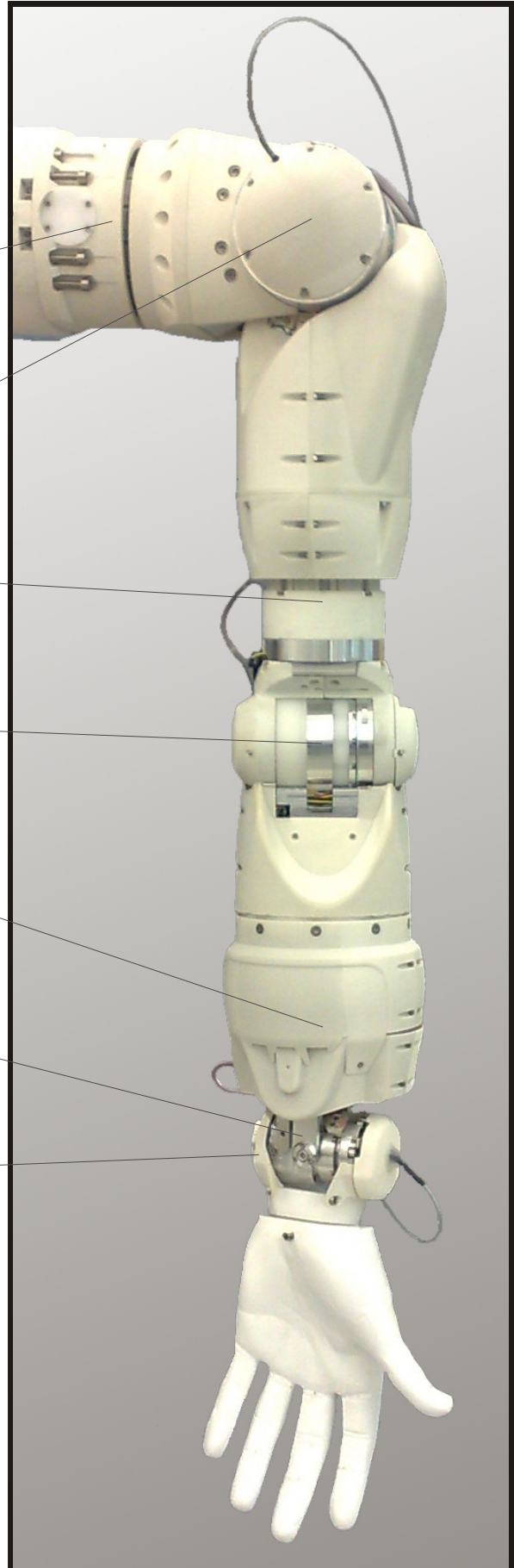
Range Of Movement - 15°
Max Torque - 3Nm
Max speed per second - 185°

7. Wrist flexion extension

Range Of Movement - 100°
Max Torque - 3Nm
Max speed per second - 185°

Each joint is fitted with:

- * Limit / homing switches
- * CANbus motor controller
- * Incremental position sensor
- * Absolute position sensor
- * Torque sensor



Each arm is wired with a single CANbus for operation of the joints and to monitor the sensors

