

### Controller

components used to input data from the environment for processing.

### Manipulator

to process inputs and produce outputs to control the actions of the manipulator and end effector.



### Sensors

is the arm that can typically move in a range of directions using actuators.

### Effectors

is the tool on a robots arm. Like the manipulator are moved using actuators.

### Human interface

are special grippers to work with a specific type of object.



### Power supply

is used to program the robot or control it manually. Some types of human interfaces include media ports to input pre-programmed instructions, computer based control applications and control panels with push buttons.



is where a robot gets its energy for its sensors, controller and actuators. This is typically in the form of electrical energy.

