An industrial robot with five joints closely resembles a human arm - it has the equivalent of a shoulder, an elbow and a wrist. Robotic arm has a vital role in industrial development. Study of Robotic Arm is a combination of physics, mathematics, mechanical, electronics, structural engineering and computer science.

Robotic Arm is versatile training equipment for all robotics enthusiasts to understand the very basic concept of robotics. Robotic arm can be controlled from software or control panel. Control panel has LCD, switches, home sensor LED, connector for external interface with DIP switches and USB interface. From software user can control each DOF individually through mouse click or key board. Programming a robot was never so easy before our software where user can write instructions in editor window which after compiling can directly downloaded into the processor of robotic arm for defined Automation Task.

- Study of Stepper motor, Servo motor, DC Motor and feedback control system
- Easy steps for programming robotic Arm
- Each servo can be controlled individually by giving start angle, stop angle and speed
- Each axis can be controlled individually
- Can be operated from 8 bit microcontroller to ARM processors
- Can be controlled from computer
- Easy instruction programming editor for Programmable tasks
- Optional interfacing with PLC
- Ample work area
- Touch operated ON/OFF switch
- Auto set to home position
- User can develop own applications
- Self-contained and easy to operate
- Data acquisition using USB
- User friendly software
- Exhaustive course material, references and Demo Programs

Technical Specifications

Work volume	:	2100000 mm$_3$
Base AOF	:	300°
Elbow AOF	:	90°
Wrist AOF	:	180°
Wrist Turn AOF	:	180°
Gripper AOF	:	80°
Allowed Payload	:	350 g
Number of Stepper Motor	:	1
Number of DC Motor	:	2
Number of Servo Motors	:	3
Number of limit Switch	:	1

Stepper Motor Specifications :

Type	:	6 wire, Unipolar
Step Angle	:	1.8°
Holding Torque	:	20 Kg.cm
Operating Voltage	:	5 Volts

Software Windows

Servo Motor Specifications:

Control System	:	PWM 1520 ìsec Neutral
Stall Torque	:	16 Kg-cm
Operating Voltage	:	5 Volts

DC Motor Specifications:

Control System	:	PWM 1520 ìsec Neutral
Stall Torque	:	7.5 Kg-cm
Operating Voltage	:	12 Volts
Sensor	:	Limit Switch
Dimensions (mm)	:	W 190 × D 190 × H 650
Weight	:	3 Kg (approximately)
Power Supply	:	230 V ±10%, 50 Hz (others on request)

Note: Specifications are subject to change.