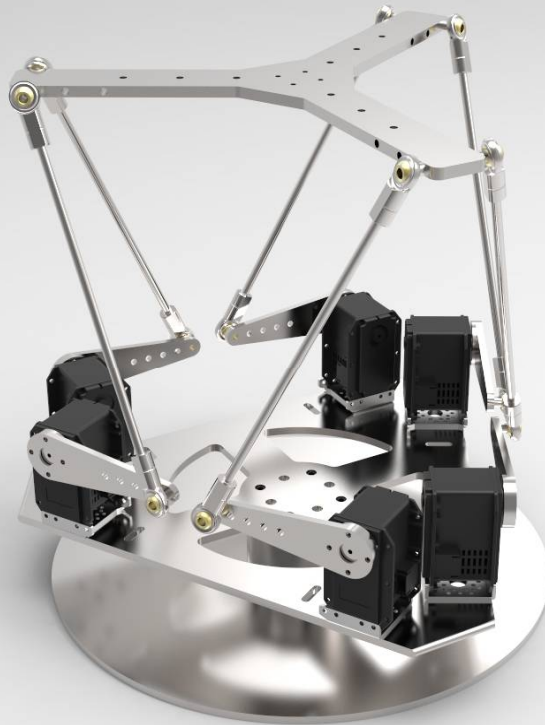


NUGENIX

SANTULAN 6-DoF PARALLEL ROBOT LEARNING SYSTEM



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6-RSS PARALLEL MANIPULATOR TECHNICAL SPECIFICATIONS

MECHANICAL

Type	6 DOF, Parallel 6-RSS MANIPULATOR
Number of axis	6
Pose repeatability	±0.173 mm (ISO 9283:1998)
Weight	5 kg with mounting base
Cubical workspace	60mm × 60mm × 60mm
Maximum Displacements	X ~ 320mm, Y ~ 308mm, Z ~ 158mm
Maximum Angular Displacements	Roll ~ 43°, Pitch ~ 25°, Yaw ~ 65°
Payload	3 kg (at 11.1V)
Operating temperature	-5°C to +80°C
Mounting position	Floor, ceiling, walls, floating
Size	300mm × 300mm × 450mm with Supporting Base Stand of 50mm.
Surface finish, paintwork	Base stand: (stationary) Metallic gray, Moving parts: Chromium plated
Material	Body: Chromium plated mild steel, Actuators: Engineering plastic body Links: Mild Steel Coupler and Bolts: Stainless Steel
Joint Level Accuracy	0.088°
Minimum Incremental Motion X, Y, Z	1.5mm
Maximum Velocity	0.5m/s
Maximum Joint Torque	5.5N.m (at 11.1V) 6.0N.m (at 12V) 7.3N.m (at 14.8V)
Maximum Joint Speed	378°Per Second
Force/Torque Control	Torque control (upto 10-bit precision) at each joint allows end-effector force/torque control

Sound Level < 50dB

Top MANIPULATOR

Modified for more agility and light weight. Provision for mounting sensors and gripper.

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ELECTRICAL

Operating Voltage	11.1V 12.0V (Recommended) 14.8V
Maximum Current	30A at Full load
Standby Current	600mA
Connecting Cable	Single 3-Wire cable for Communication and Power.
Actuator Characteristics	Full metal gear PID adjustable using separate Actuator GUI Contactless absolute encoder (12 bit for 360°) Feedback: Position, Temperature Position, Velocity or Torque Control
Power Supply	110/220 V to 12V

6-RSS PARALLEL MANIPULATOR INCLUDES

- ❖ 1 No. all rotary 6-RSS Parallel MANIPULATOR with actuators and base stand.
- ❖ USB to TTL converter for communication.
- ❖ 12V, 30A power supply.
- ❖ Junction box with Emergency stop.
- ❖ 3 core, 10m, submersible cable.
- ❖ USB Drive with Assembly Instructions, User Documentation, Android Application, Videos and Example codes.
- ❖ API compatible with Python and Java.

LAPTOP INCLUDED WITH SOFTWARE PRE-INSTALLED

Laptop with i5 processor and software for working with provided robot.

PELICAN CASE INCLUDED



FIELD OF USE

- ❖ As a Laboratory Apparatus or in Classroom for Demonstrating Parallel Robot.
- ❖ Positioners for Cameras, Solar Plates, Mirrors, Surgical Instruments.
- ❖ Motion MANIPULATORS: Simulators, Gaming Stations, Medical Applications, Test Workbench.
- ❖ Torque controlled joints allow it to be used as a Haptic Feedback Device or as an Assembly Robot.
- ❖ Low Frequency Vibration Compensators or Dynamic Balancing.



CONTACT US FOR MORE INFORMATION

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