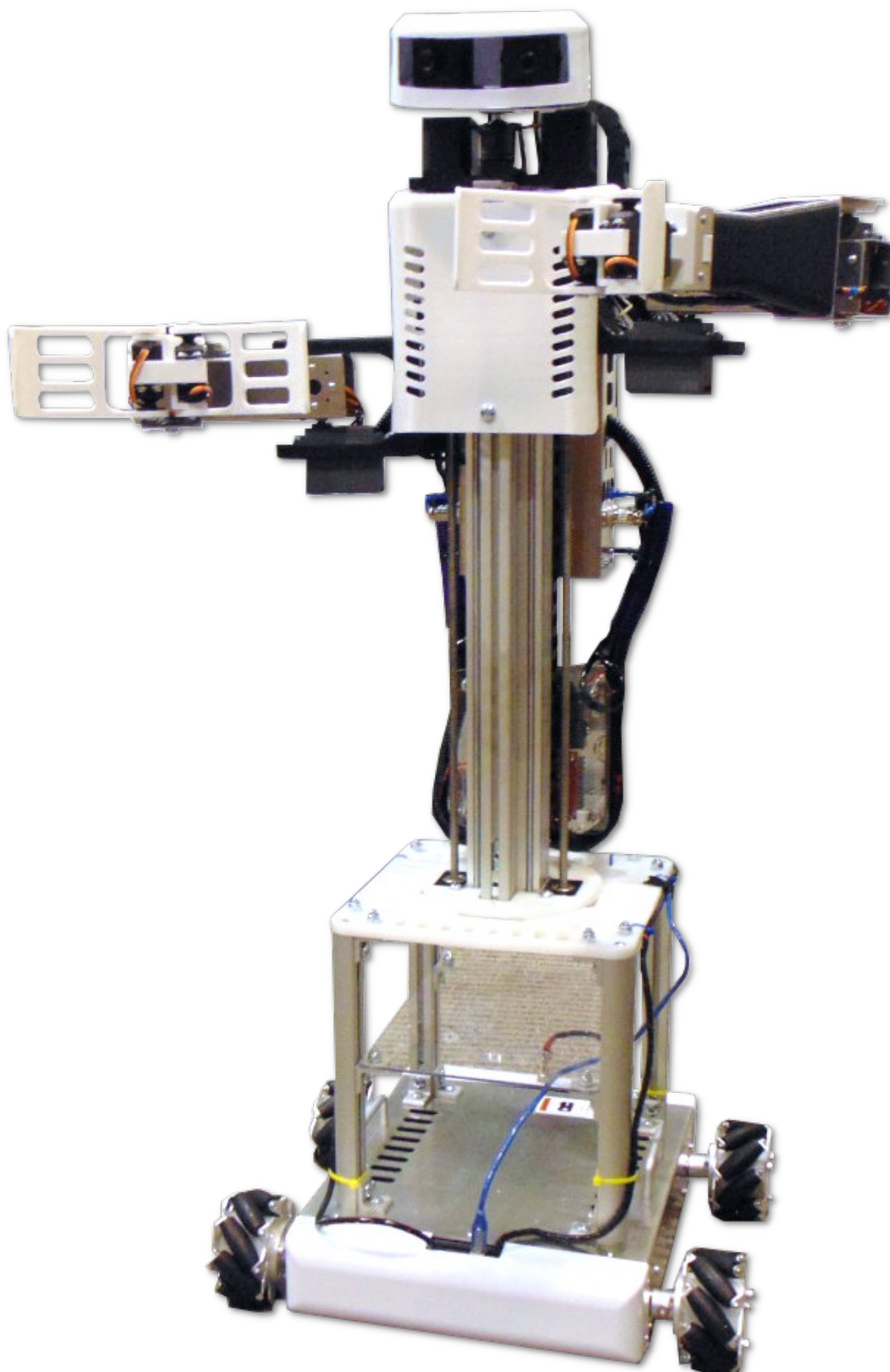
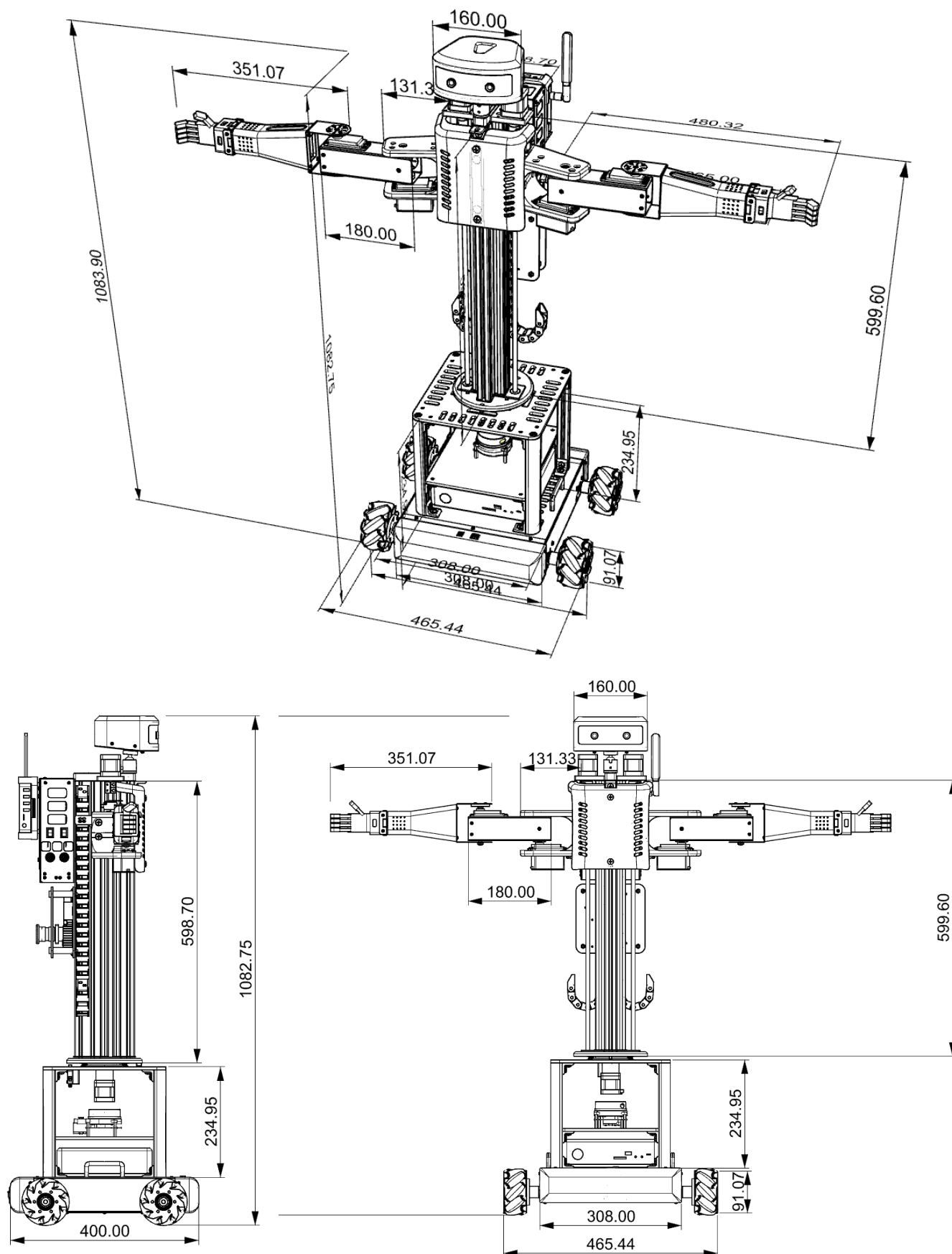


CUSTOM 2-ARM MOBILE MANIPULATOR ROBOT*QUICK SPECIFICATION SHEET*

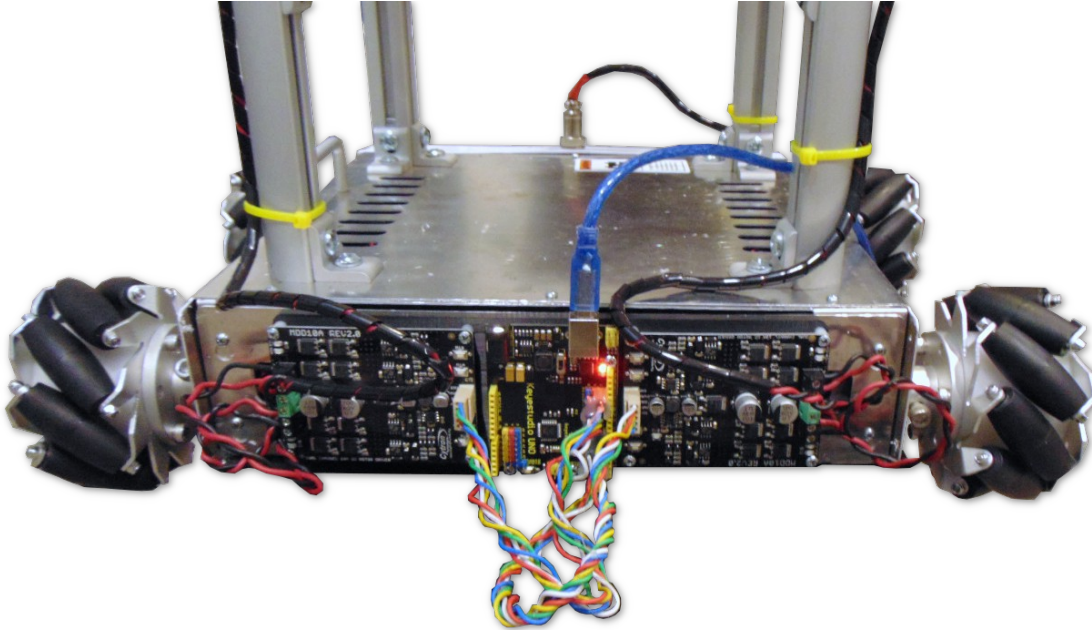
Frontal view of Custom 2-armed Mobile Manipulator Robot Platform

[DIMENSIONS] 470 x 400 x 1080 mm (1.5 x 1.3 x 3.5 ft)

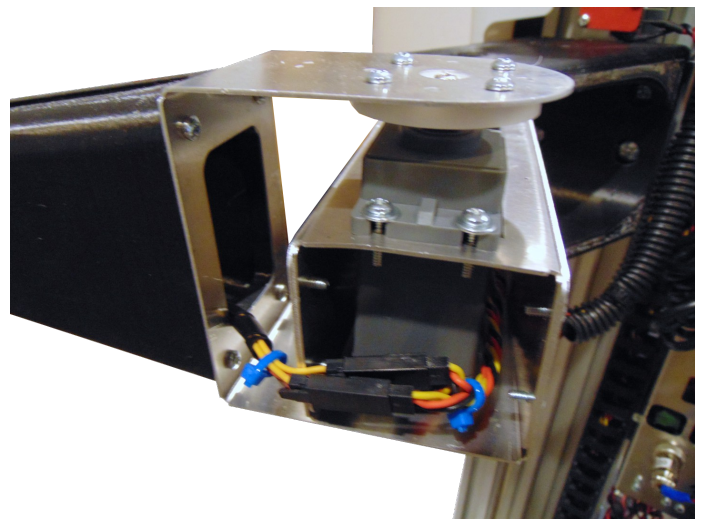
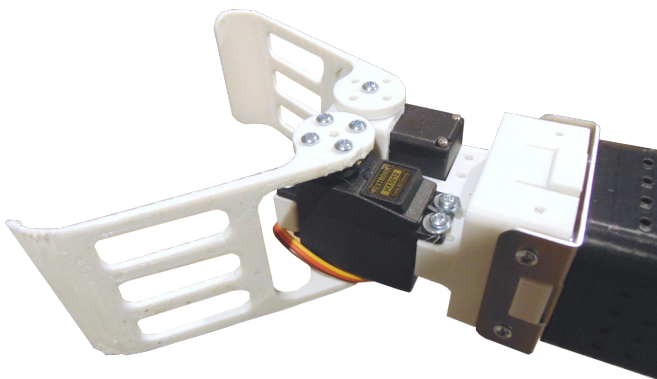


[BASE]

- 4x 80rpm DC Worm Gear Motor
- 4x 12V 7AH Sealed Lead Acid Batteries
- 4x 100mm Omnidirectional Mecanum Wheels
- 2x Dual DC High Current PWM DC Motor Controller
- 1x Arduino UNO type microcontroller

**[LEFT ARM | RIGHT ARM]**

- 1x Arduino-compatible MKS Gen 1.4 microcontroller board
- 1x 500mm Stroke NEMA 17 Stepper Motor Linear Actuator
- 2x Heavy Duty Large Servo Motor (shoulder | elbow)
- 2x Standard Size Servo Motor (grippers)



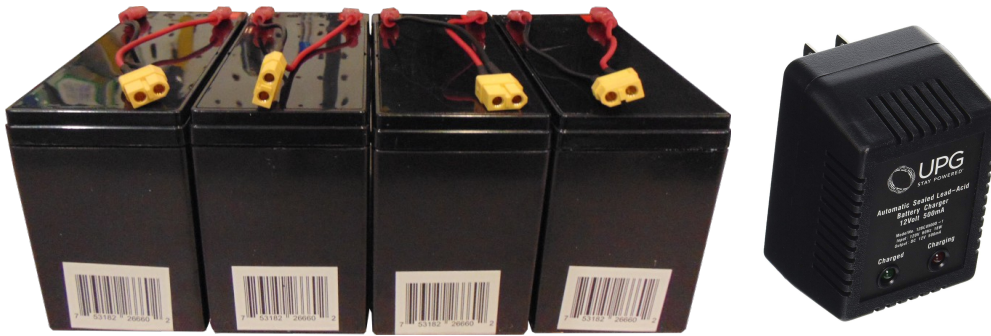
**Left image: Standard gripper mount, actuated by two standard servos.*

**Right image: Motorized elbow and shoulder, actuated by heavy duty large servos.*

[POWER MANAGEMENT]

4x 12V 7AH Sealed Lead Acid Batteries *(Estimated life 3-5 hours on full charge.)*

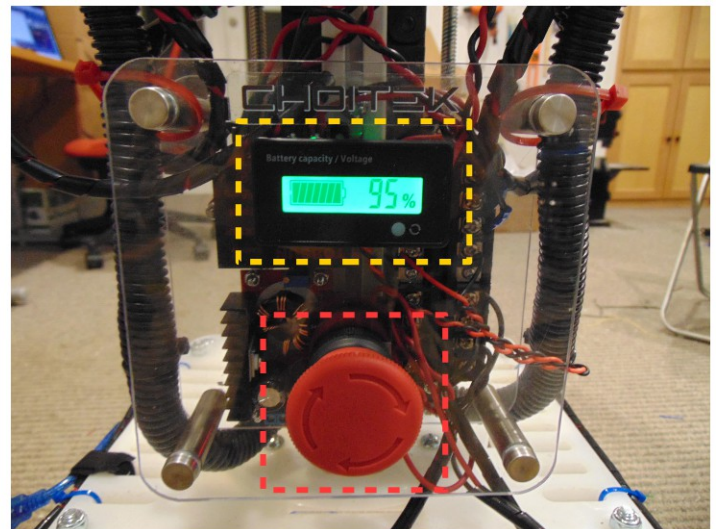
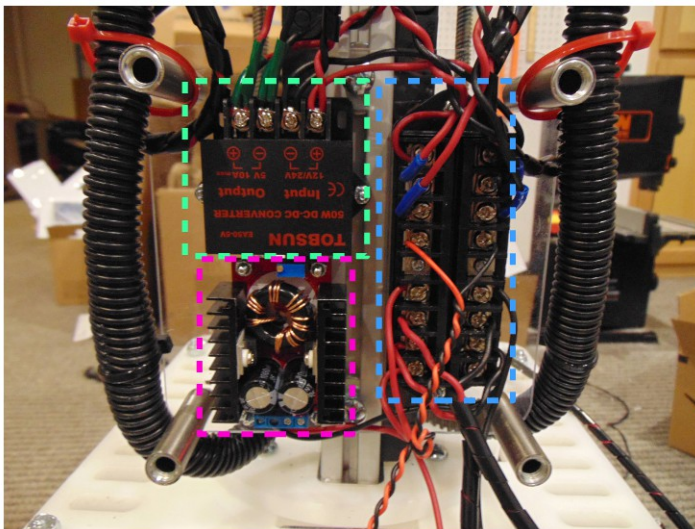
1x 12V Sealed Lead Acid Battery Charger



1x 12V to 5V Step-Down Power Converter *(to power 5V servomotors.)*

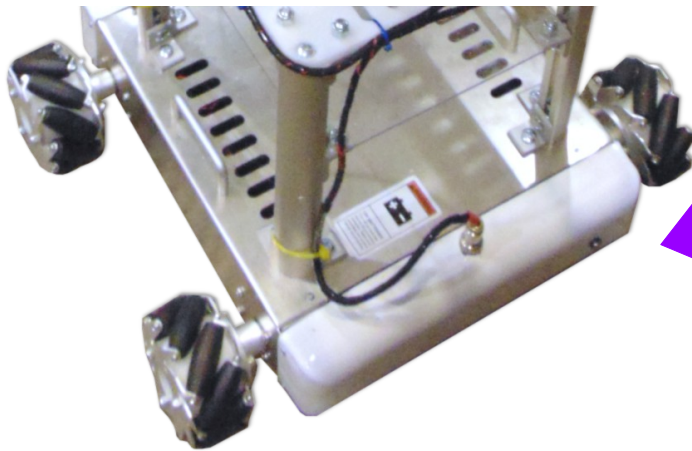
1x 12V Terminal Block *(to route 12V power to control boards and converters.)*

1x 12V to 19.5V Adjustable Step-Up Power Converter *(to power main computer.)*



1x Battery Voltage Reader *(to show how much power is left)*

1x Big Red Emergency On/Off Switch *(turns entire system on/off. Twist for on, push for off.)*



To charge batteries, simply turn system off and **plug in charger to charging port (on back).**

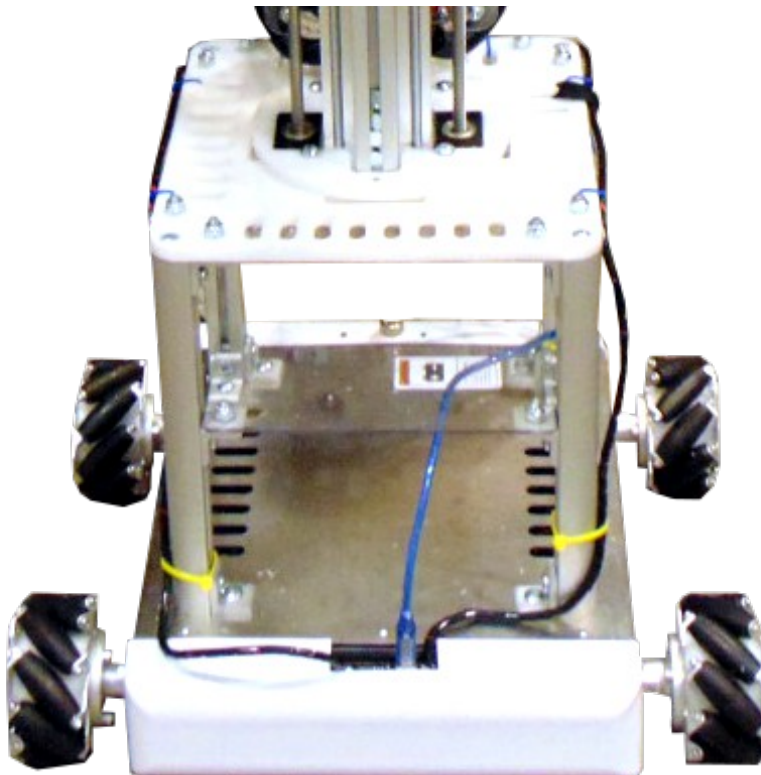
[HEAD]

1x Interchangeable Head (compatible with standard 1/4-20 camera mounting bolts.)

- 2x ELP Industrial Webcams for computer vision



Head is interchangeable with a 7in HDMI Camera Monitor and other sensor accessories that are compatible with 1/4-20 mounting bolts and hardware.



Base has plenty of room to add computer, LIDAR, audio and other sensors and equipment.