

Robo-Erectus Jr-2015 KidSize Robot Specifications.

Buck Sin Ng, Carlos A. Acosta Calderon and Changjiu Zhou.


Advanced Robotics and Intelligent Control Centre,

Singapore Polytechnic

url: www.rob-erectus.org

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Physical Specifications of the REJr Bv-MkIV

1. Physical Specifications.					
Weight	Dimensions			Speed	
	Height	Width	Depth	Walking	Running
4.1kg	560mm	330mm	160mm	400mm/sec	—
2. List of Degrees of Freedom.					
Joint	Roll	Pitch	Yaw		
Head		✓	✓		
Shoulder	✓	✓			
Elbow		✓			
Hip	✓	✓	✓		
Knee		✓✓			
Ankle	✓	✓			
3. Sensors.					
Sensor	Details				
Camera	Logitech C905: 640x480 Resolution 30fps.				
Rate Gyro (IMU)	IDG-3200: $\pm 2000^\circ/sec$ angular rate.				
Accelerometer(IMU)	ADXL345: $\pm 6g$				
4. Actuators.					
Actuator	Torque			Speed	
Kondo KRS-4034	41.7 kg.cm @ 11.1v			0.17 sec / 60 deg @ 11.1v	
Kondo KRS-6003	67.0 kg.cm @ 11.1v			0.22 sec / 60 deg @ 11.1v	
5. Specifications of the boards.					
Features	High Level Host Processor			Low Level Micro-processor	
Processor	fitPC2i			dsPIC32	
Speed	1600Mhz			80Mhz	

Physical Specifications of the REJr Bv-MkIII+

1. Physical Specifications.					
Weight	Dimensions			Speed	
	Height	Width	Depth	Walking	Running
3.5kg	560mm	300mm	140mm	450mm/sec	—
2. List of Degrees of Freedom.					
Joint	Roll	Pitch	Yaw		
Head		✓	✓		
Shoulder	✓	✓			
Elbow		✓			
Hand		✓			
Hip	✓	✓	✓		
Knee		✓✓			
Ankle	✓	✓			
3. Sensors.					
Sensor	Details				
Camera	Logitech C905: 640x480 Resolution 30fps.				
Rate Gyro (IMU)	IDG-3200: $\pm 2000^\circ/sec$ angular rate.				
Accelerometer(IMU)	ADXL345: $\pm 6g$				
4. Actuators.					
Actuator	Torque			Speed	
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Features	High Level Host Processor			Low Level Micro-processor	
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