

Team Description Paper: HuroEvolution^{JR} Humanoid Robot for Robocup 2011 Humanoid League

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Specification

ROBOT Name	HuroEvolution ^{JR}		
Height of Robot	460mm		
Arm length	490mm		
Weight of Robot	3.1kg		
Walking Speed	Maximum: 10 cm/s		
Type of motor	6xAX-12(Servo motor)	8xRX-28(Servo motor)	2xRX-64(Servo motor)
Torque	12.0kg/cm~ 16.5kg/cm	28.3kg/cm~ 37.7kg/cm	64.4kg/cm~ 77.2kg/cm
Speed	0.196 sec/60°	0.126 sec/60°	0.157 sec/60°
Degree of freedom	16 With Leg: 5 x 2 (RX-28 & RX-64) Arm: 2 x 2 (AX-12) Head: 2 (AX-12)		
Computing unit	PICO820(Single Board Computer) Processor: Intel® ATOM™ processor Z530 Operating System: Windows XP		
Motion Controller	AVR ATmega1280		
Camera	Webcam(Philips SPC900NC) Frame rate: 90fps Pixel Clock Frequency: 29.5MHZ Total Picture Element 1024 (H) x 768 (V)		
Batteries	1 x Li-Po 11V 1500mAh , 1 x Li-Po 14.8V 1500mAh		
Accelerometer	ADXL345		