

AUTMan Humanoid TeenSize Robots Specification Paper

RoboCup 2016 Humanoid TeenSize Robot League

Bio-Inspired System Design Lab,
Mechanical Engineering Department,
Amirkabir University of Technology (Tehran Polytechnic). Tehran, Iran.
<http://autman.aut.ac.ir>

Autonomous Agents Laboratory
University of Manitoba, Winnipeg, Canada, R3T 2N2
<http://aalab.cs.umanitoba.ca>

Robot Name: *ARASH*

Specification:



Height	100 Cm
Weight	7.5 Kg
Walking Speed	35 cm/s
Degrees of Freedom	20 in total (2x3 in hands, 2x6 in legs, 2 in neck)
Type of Motors	ROBOTIS Dynamixel® (MX-28, MX-64 and MX-106)
Sensors	1- GY-80 9DOF IMU (lower body) 2- MPU 9150 (upper body)
Camera	Logitech C905 Camera
Resolution	640*480 pixels
Computing Unit	QuanMax® QutePc3001 CPU: 1.1 GHz Intel Memory: 2 Gb DDR3 RAM and 32Gbyte of SSD.
Low level controller	ROBOTIS OpenCM9.04 (ARM Cortex M3 @72Mhz)
Wi-Fi Module	Wi-Fi 802/11 - 2.4Ghz
Battery	14.8v, Li-Po 6800mAh