

# Rhoban Football Club – Robot Specification Page

## Humanoid KidSize League, Robocup 2014

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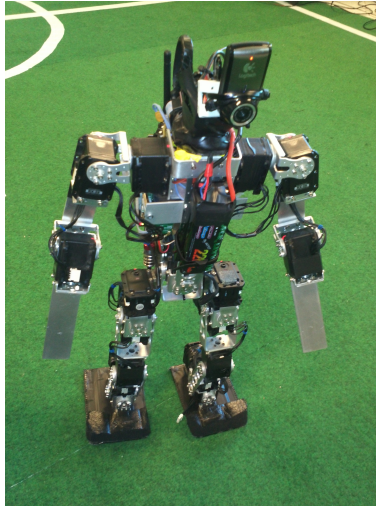
CNRS, LaBRI, University of Bordeaux 1  
33405 Talence, FRANCE

### 1 Sigmaban 1.0



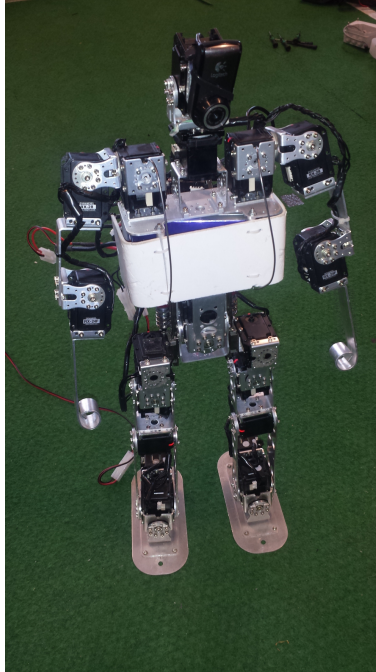
- **Robot name:** Sigmaban 1.0
- **Height:** 56cm
- **Weight:** 3.7kg
- **Walking speed:** 0.15m/s
- **Number of degrees of freedom:** 22
- **Type of motors:** Dynamixel RX-28, Dynamixel RX-64.
- **Sensors:**
  - Camera Type: Philips SPC620NC
  - Gyroscope: IDG500
  - Accelerometer: ADXL335.
- **Computing unit(s):** ARM9, 64MB SDRAM, 210MHz  
ARM7, 64kB RAM, 55 MIPS.

## 2 Sigmaban 1.1



- **Robot name:** Sigmaban 1.1
- **Height:** 56 cm
- **Weight:** 4.0kg
- **Walking speed:** unknown
- **Number of degrees of freedom:** 22
- **Type of motors:** Dynamixel RX-28, Dynamixel RX-64.
- **Sensors:**
  - Camera Type: Logitech C905
  - Gyroscope: IDG500
  - Accelerometer: ADXL335.
  - FSR force sensor (feet)
  - Potentiometers (hip linear passive joint)
- **Computing unit(s):** FitPC 2GB SDRAM, 1.6GHz ARM7, 64KB RAM, 55MIPS.

### 3 Sigmaban 1.2



- **Robot name:** Sigmaban 1.2
- **Height:** 56 cm
- **Weight:** 4.0kg
- **Walking speed:** 12 cm/s
- **Number of degrees of freedom:** 22 actuated, one passive linear joint
- **Type of motors:** Dynamixel RX-24, Dynamixel RX-28, Dynamixel RX-64.
- **Sensors:**
  - Camera: Logitech HD Pro C905
  - IMU: 9 Degrees of Freedom - Razor
- **Computing units:**
  - Low-level: ARM7 (stm32) 72MHz (Maple mini)
  - High-level: fit-PC2, Intel Atom 1.6GHz, 2GB SDRAM, SSD 128Go
- **Operating System:** Linux (Debian 7)