

## 01. RoboterFußball-Club Berlin Robot Specification Sheet 2021



<b>Height</b>	73cm
<b>Weight</b>	4500g
<b>Walking Speed</b>	$\approx 25\text{cm/s}$
<b>DoF</b>	20 total (6 per leg, 3 per arm, 2 in the head)
<b>Actuator &amp; Position sensors</b>	8 Dynamixel MX-106 8 Dynamixel MX-64 4 Dynamixel MX-28

*Parameters* are derived from the Robot Model Specifications v1.01 provided by the TC.

**Camera** Logitech HD Pro Webcam C920 at 1280x720 [1]

*fieldOfView* parameter is derived from the horizontal field of view of the datasheet.

**Gyroscope & accelerometer** one 6 DOF MPU6050 [2]

*resolution* parameter of the gyroscope is derived from the Sensitivity Scale Factor of the datasheet on page 12.

*LUT* of the gyroscope is derived from the Full-Scale Range of the datasheet on page 12.

*resolution* parameter of the accelerometer is derived from the Sensitivity Scale Factor of the datasheet on page 13.

*LUT* of the accelerometer is derived from the Full-Scale Range of the datasheet on page 13.

## References

- [1] Logitech c920 hd pro webcam - technical specifications. Technical report. <https://logitech.software/logitech-c920-hd-pro-webcam/>.
- [2] MPU-6050 product specification revision. Technical report. [https://download.bastelgarage.ch/Datasheet/MPU6050\\_Datasheet.pdf](https://download.bastelgarage.ch/Datasheet/MPU6050_Datasheet.pdf).