REEM-C©

TECHNICAL SPECIFICATIONS

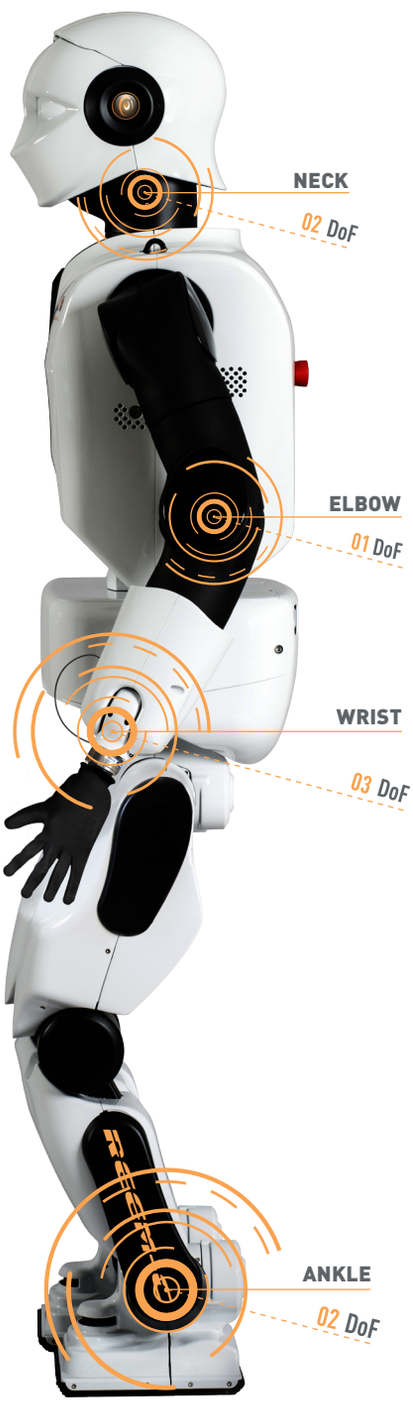
Simulation model available at:
wiki.ros.org/Robots/REEM-C

GENERAL FEATURES

Height	165 cm
Width	60 cm
Weight	80 Kg

68 DEGREES OF FREEDOM (DoF)

Legs	6 (x2)	Torso	2
Arms	7 (x2)	Head	2
Hands	19 DoF (3 actuators) (x2)		



PAL ROBOTICS

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PAYLOAD	Hand payload	1 Kg (arm stretched)
	Arms payload	10 Kg (with both arms)
CONNECTIVITY	Wi-Fi	802.11 a/b/g/n 5 GHz and 2.4 GHz
	Ethernet	1000 Base T
ELECTRICAL FEATURES	Power System	Lithium-Ion Battery 48 V
	Nominal Energy	1225 Wh
	Battery Autonomy	3h walking / 6h stand by
INTERFACES	Speakers	x2 (5 watt)
	Microphones	x4 linear array
SENSORS	Force/Torque sensors	6 axis F/T sensor x2 in ankles
	Sonars	x4 (Torso, Head) / 3-300 cm range
COMPUTERS	Intel Core i7	x2 (Multimedia and Control)
SOFTWARE	OS	Ubuntu LTS, Real Time OS
	Middleware	ROS, OROCOS, ros_control, MoveIt!
	Applications	Walking, Grasping, Face Recognition, Speech Recognition

VISION	Stereo Camera	Back Camera
Sensor type	CMOS global shutter 1/3"	CMOS global shutter 1/3"
Resolution	1280 x 960	752 x 480
Optics	4.5 mm mount C lens	2.5 mm mount M12 lens
Max. frame rate	60 fps	90 fps

OPTIONALS	Force/Torque sensors	6 axis F/T sensor x2 in wrists
	Lasers	x2 (feet) 4m, 0.36º, 10 Hz
	IMU	5 G acceleration / 450 deg/s

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