PAL

KANGAROO

LEAP INTO THE FUTURE OF DYNAMIC BIPEDAL ROBOTICS

Robust Design

Combination of flexible and rigid materials for impact absorption

Proximal actuation

Optimized actuator placement to enhance dynamic movements

Novel Leg Architecture

Linear actuators with closed kinematic chains for efficient locomotion

Height from

152 cm

Weight from

38 kg

Control loop

2 kHz

Leg DoF

6

Autonomy

Up to 4h

KANGAROO

TECHNICAL SPECIFICATIONS

Version	Lite	Standard	Plus
Height	1,52 m	1,58 m	1,58 m
Weight	38 kg	43 kg	45 kg
Control loop	1 kHz Ethercat	2 kHz Ethercat	2 kHz Ethercat
Autonomy	Up to 4 hours	Up to 4 hours	Up to 4 hours
Control PC	Intel i7, 32GB RAM, 1 TB SSD	Intel i7, 32GB RAM, 1 TB SSD	Intel i7, 32GB RAM, 1 TB SSD
Multimedia PC	-	Intel i7, 32GB RAM, 1 TB SSD	Intel i7, 32GB RAM, 1 TB SSD
Connectivity	Wi-Fi 6 x2 (2.4 GHz + 5 GHz)	Wi-Fi 6 x2 (2.4 GHz + 5 GHz)	Wi-Fi 6 x2 (2.4 GHz + 5 GHz)
Legs	2× 6 DoF Leg	2× 6 DoF Leg	2× 6 DoF Leg
Torso	Fixed torso	2 DoF	2 DoF
Perception kit	-	4× RGB-D Camera	4× RGB-D Camera
AI Kit	-	NVIDIA Jetson Orin AGX	NVIDIA Jetson Orin AGX
Leg Force Sensors	-	-	One per actuator
Compatible Simulators	Isaac Lab Mujoco Gazebo	Isaac Lab Mujoco Gazebo	Isaac Lab Mujoco Gazebo
ROS 2 API	✓	✓	✓
Transport case	Basic	Basic	Premium
Documentation	✓	✓	✓
Support & Maintenance	Yearly Subscription	Yearly Subscription	Yearly Subscription

ADD-ONS
Feet Force/Torque Sensors

PASSION FOR ROBOTICS

pal-robotics.com

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