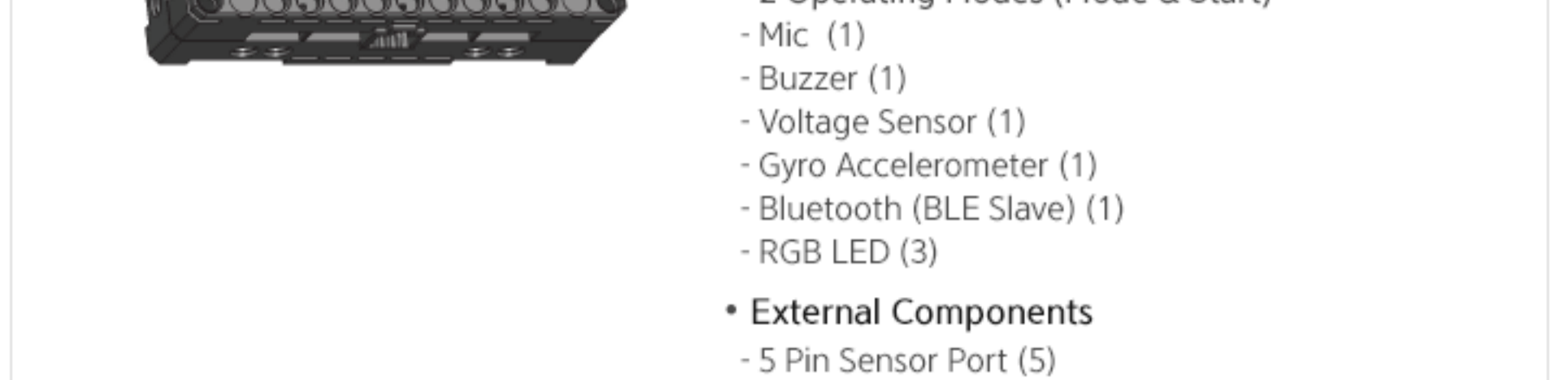
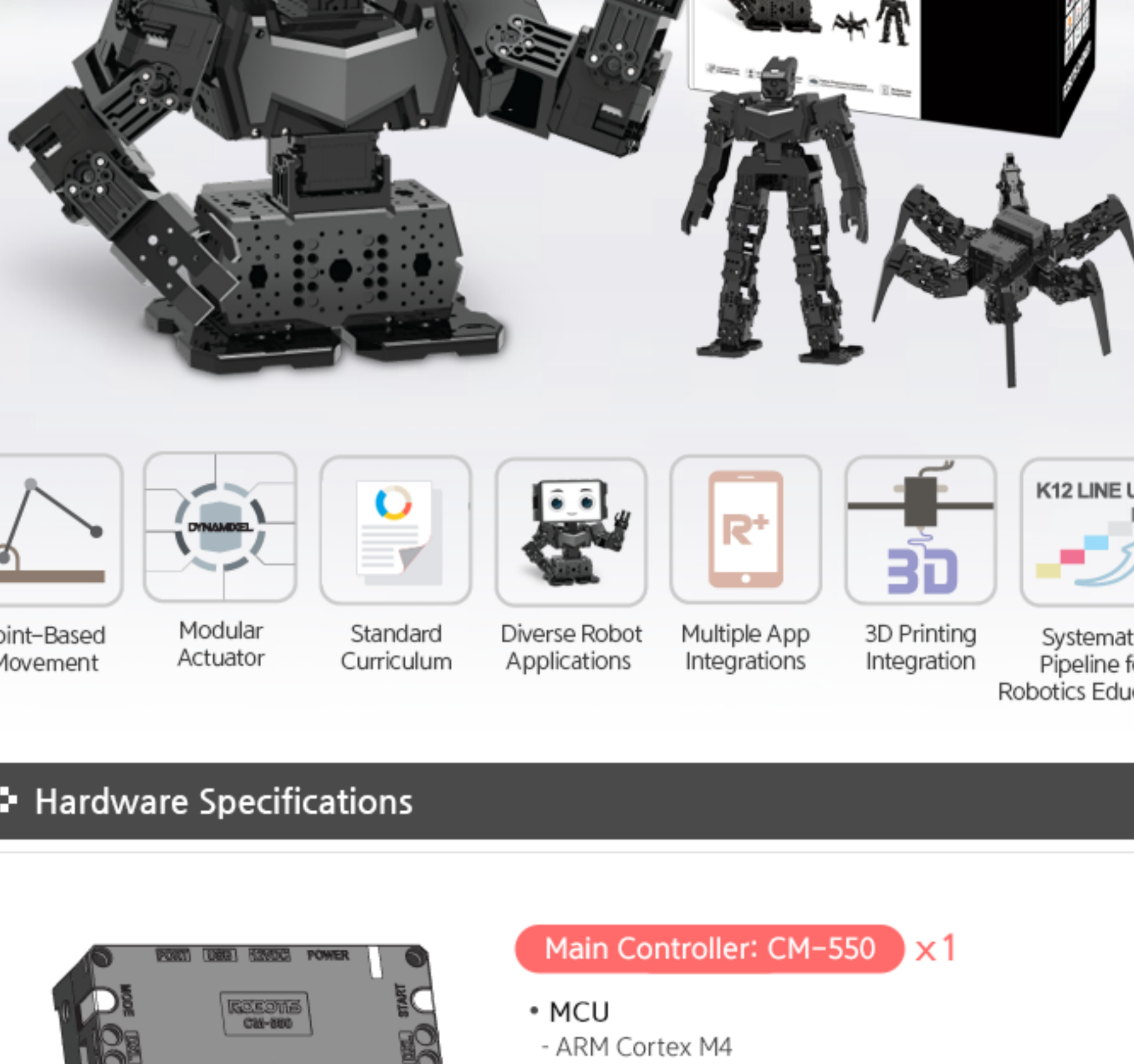
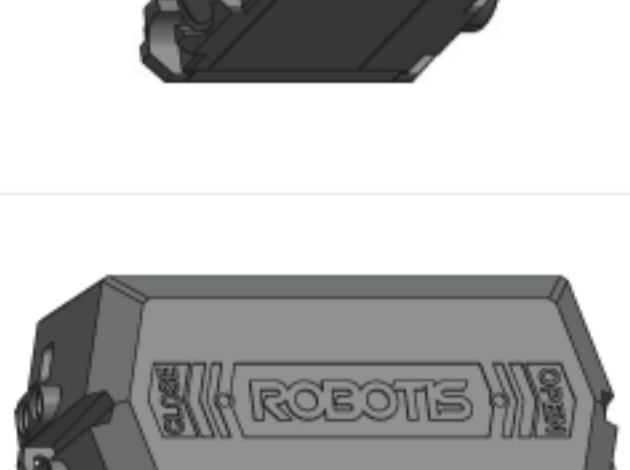


ROBOTIS ENGINEER KIT1

ROBOTIS ENGINEER KIT 1 is a next generation robotics kit, utilizing a smart device to enable AI Capabilities to be used in a variety of applications such as Education, Hobby, Entertainment and Competition Activities. The ROBOTIS ENGINEER KIT 1 provides users with a way to learn and explore diverse technologies such as AI, 3D printing, Coding, Vision Processing, and Robotic Manipulation, preparing them for technologically advanced career pathways.



Hardware Specifications



Main Controller: CM-550 ×1

- MCU
 - ARM Cortex M4
- Internal Components:
 - 2 Operating Modes (Mode & Start)
 - Mic (1)
 - Buzzer (1)
 - Voltage Sensor (1)
 - Gyro Accelerometer (1)
 - Bluetooth (BLE Slave) (1)
 - RGB LED (3)
- External Components
 - 5 Pin Sensor Port (5)
 - DYNAMIXEL X-Series 3-pin Connector (6)



Robot Exclusive Actuator (2XL430-W250-T) ×6

- Stall Torque: 1.5 (Nm) (at 12.0 [V], 1.4 [A])
- No Load Speed: 61 [rpm] (at 12.0 [V])
- Weight: 98.2 [g]
- Dimensions: (W x H x D) 36 x 46.5 x 36 [mm]
- Gear Ratio: 257:1
- Materials: Full Metal Gear Engineering Plastic Case



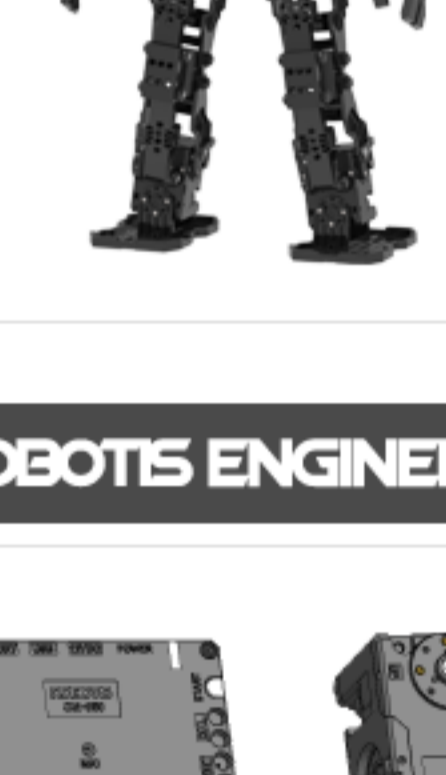
Lithium Polymer Battery ×1

- Type: Lithium Polymer
- Voltage: 11.1 [V] (3 Cell, 3S1P)
- Buffer Voltage 12.6 [V], Lowest Voltage 9.6 [V]
- Volume: 1300 [mAh]
- Discharge Rate: 15C
- Dimensions: 70 x 36 24 [mm]
- Weight: 102 [g]

ROBOTIS ENGINEER KIT1 Robot Configurations

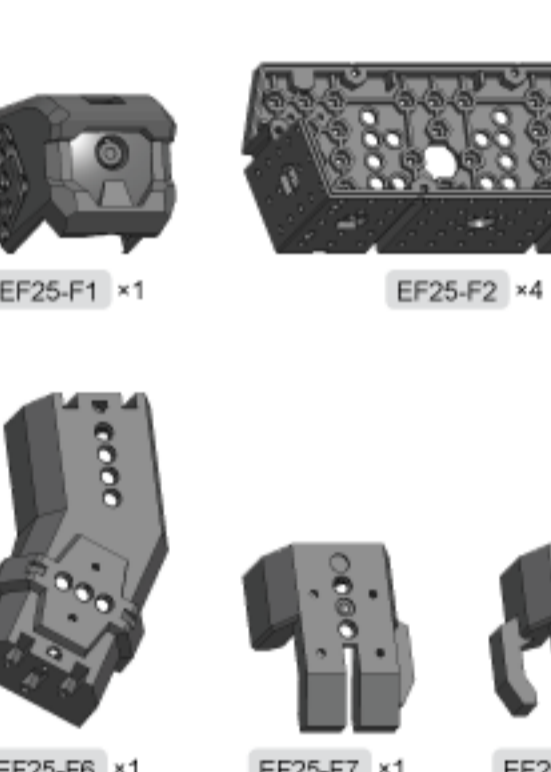


ROBOTIS ENGINEER KIT1 Download various applications on the App Store & PLAY Store download **R+ENGINEER** & **R+Task** in order to connect with your robot. Check your QuickStart Guide for additional details.



Dr.R

Dr. R is an AI-Based Smart Robot that can identify objects and faces, and voice recognition utilizing sensors on a smart device to interact with users.



SPI

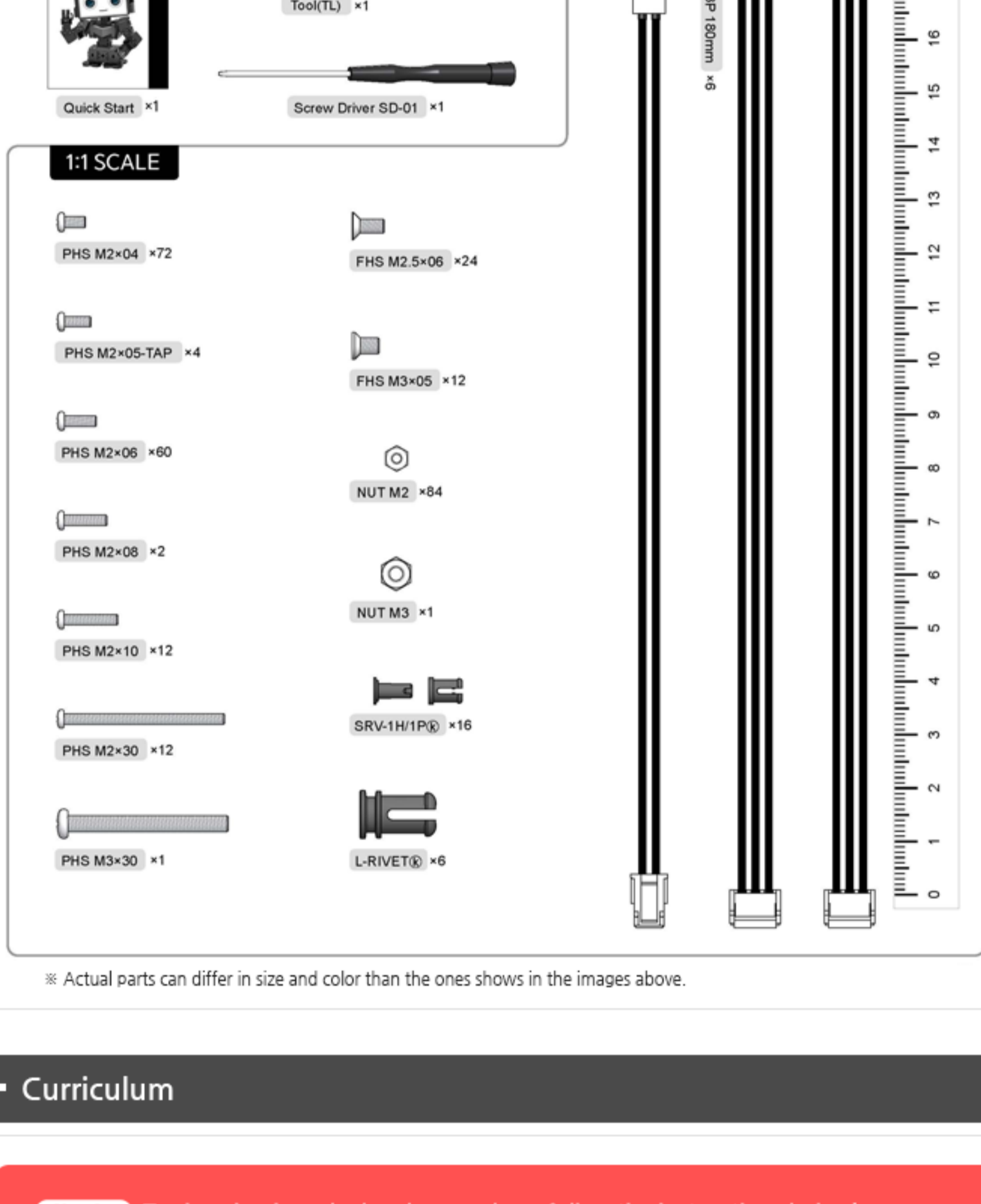
SPI is a Biomimetic Robot optimized to replicate motions of anthropods. Depending on the assembly method, users can create different variations of this robot.



MAX-E1

MAX-E1 is a Humanoid Robot standing at 38cm tall, optimized to replicate human movement, with 12 joints assembled together by 6 High-Performance 2XL430 DYNAMIXEL Motors and parallel linked legs to allow flexible motions for a variety of motions such as stable Bi-Pedal movement.

ROBOTIS ENGINEER KIT1 Part List



※ Actual parts can differ in size and color than the ones shows in the images above.

Curriculum

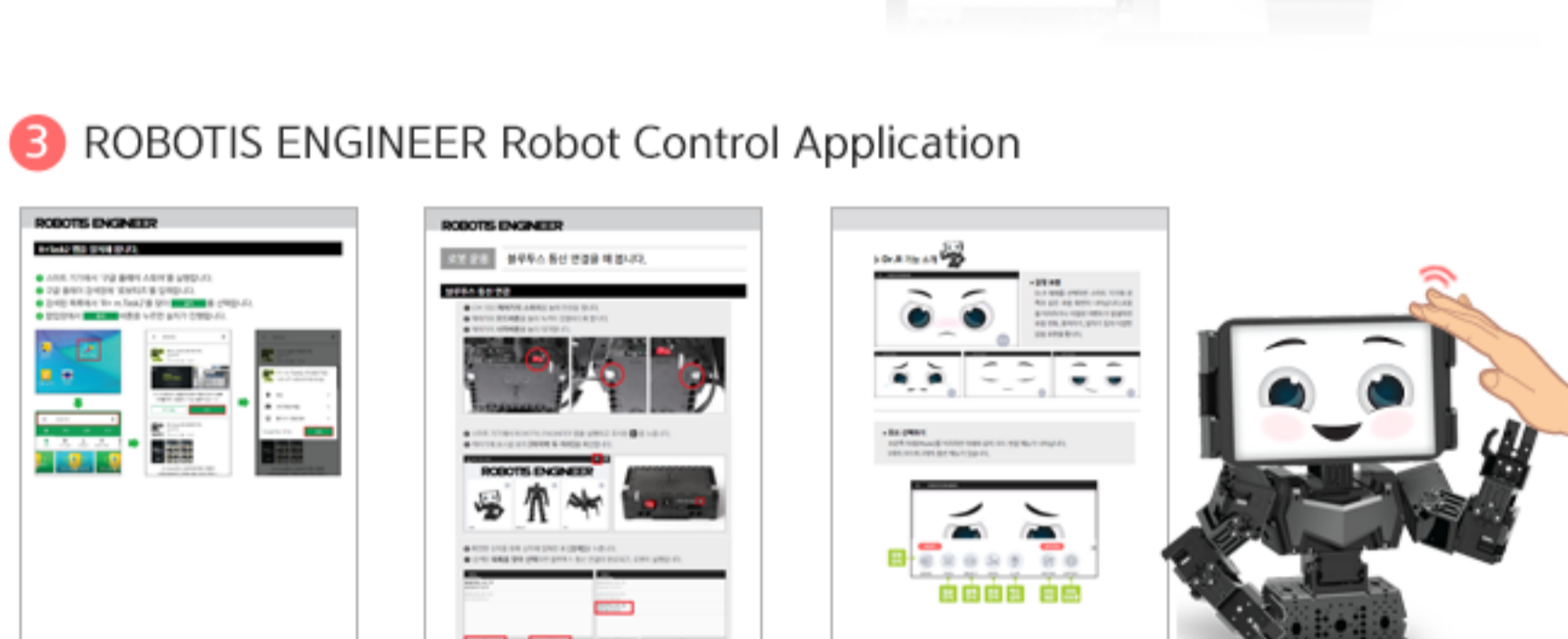
Check 1 To download curriculum lesson plans, follow the instructions below!

- Visit our home page @ en.robotis.com to access online curriculum and lesson plans!
- Create an account @ en.robotis.com
- Fill out the ROBOTIS EDU Form. (This can be found at en.robotis.com/ROBOTISENG1_EDU)
- Download 3D Printing & Programming Curriculum in PDF Format for easy classroom implementation!

Check 2 Visit the ROBOTIS e-Manual for additional resources at emanual.robotis.com!

- Visit robotis.emanual.com
- Click on STEAM -> ROBOTIS ENGINEER -> KIT 1

1 Robot Assembly

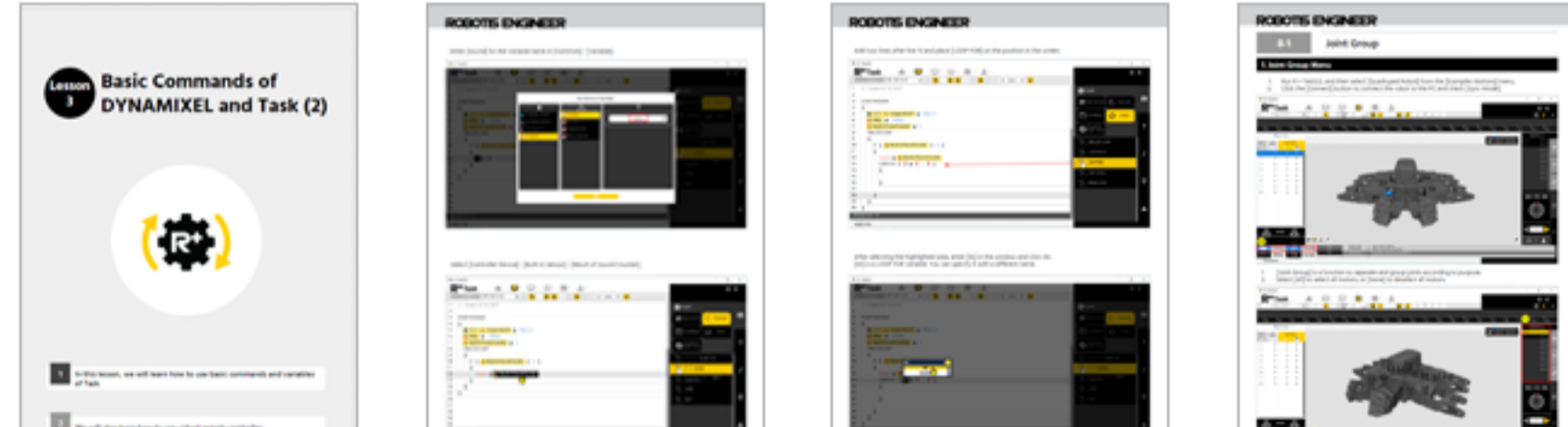


2 Download Program Application (PC, Mobile)

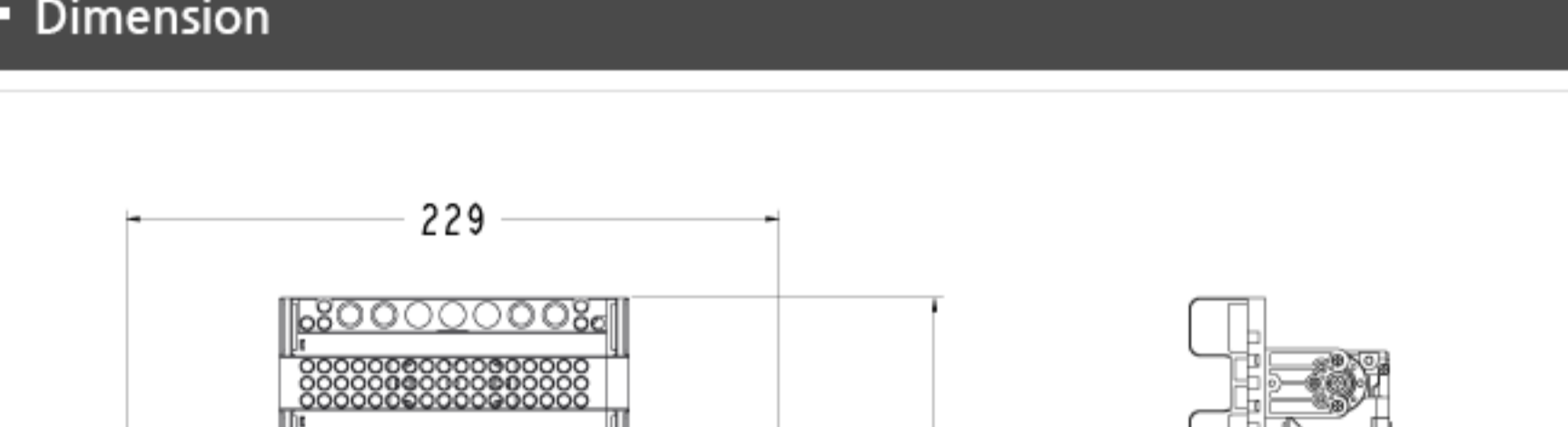
Visit our homepage (en.robotis.com) to download R+Task 3.0 for PC and Smart Devices.



3 ROBOTIS ENGINEER Robot Control Application

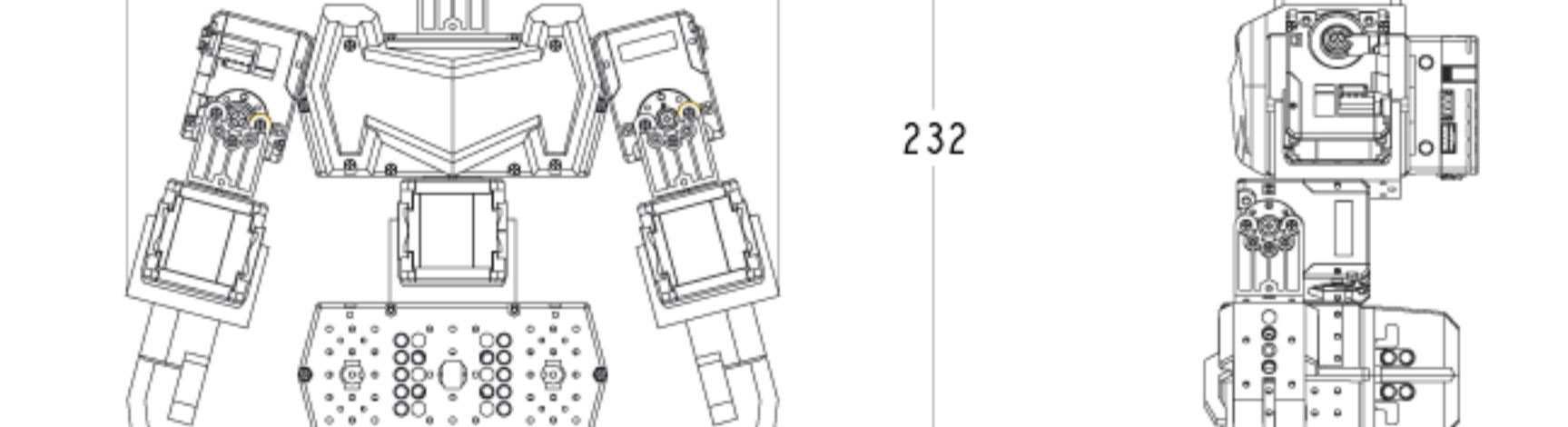


4 3D Printing + Robotics Integration Curriculum



Lesson Plans are available via PDF online.

5 Creative Robot Programming Curriculum



Lesson Plans are available via PDF online.

Dimension

