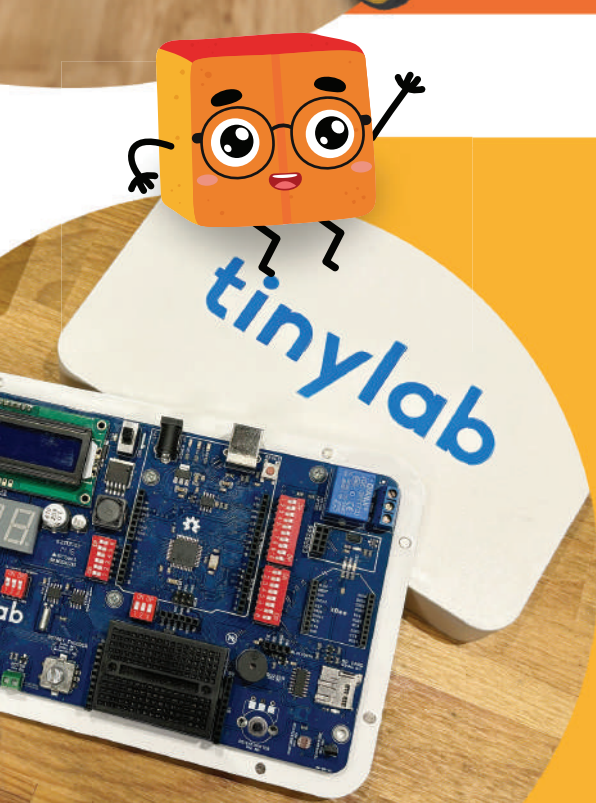


# PicoBricks

## 2024 PRODUCT CATALOG

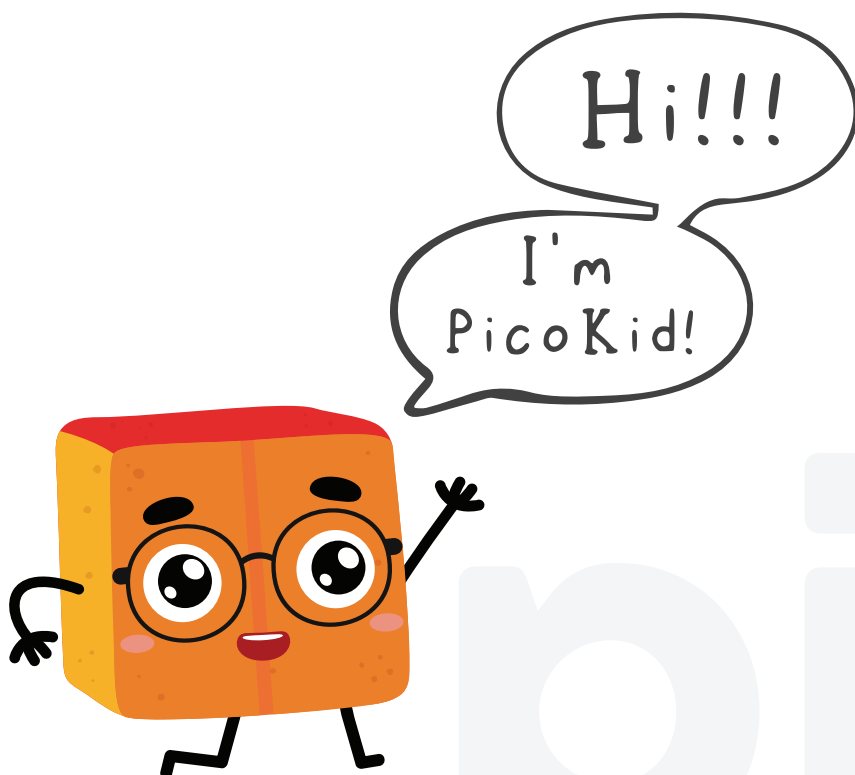


# About Us

PicoBricks: Empowering the Next Generation of Innovators in STEM Education.

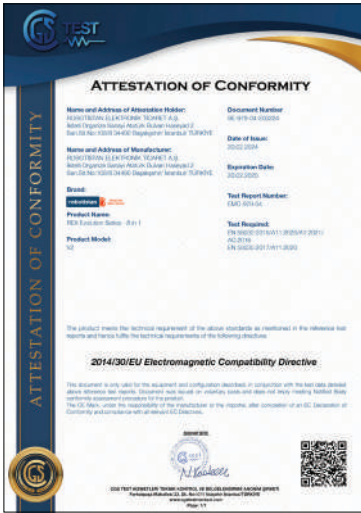
For over 15 years, PicoBricks has been crafting educational technology to inspire creativity and enhance problem-solving in STEM education. Our evolving products support educators and students alike, transforming learning into dynamic, effective experiences. With our innovative Maker and Educational Kits, we cater to all skill levels, promoting a culture of tech engagement and inventive thinking.

**Inspire, Innovate, Implement!**



pico

# Certificates & Awards



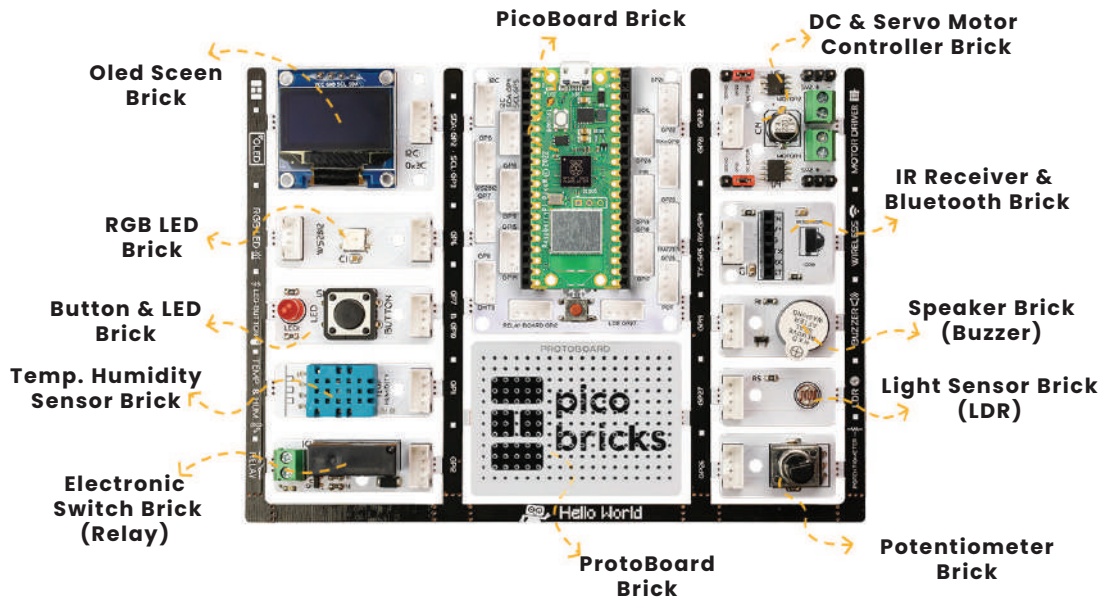
# What is PicoBricks?

PicoBricks is a versatile electronic development board, accelerating the robotic coding learning curve for both novices and experts. It extends creative horizons with 12 Detachable Modules, ideal for various maker projects.

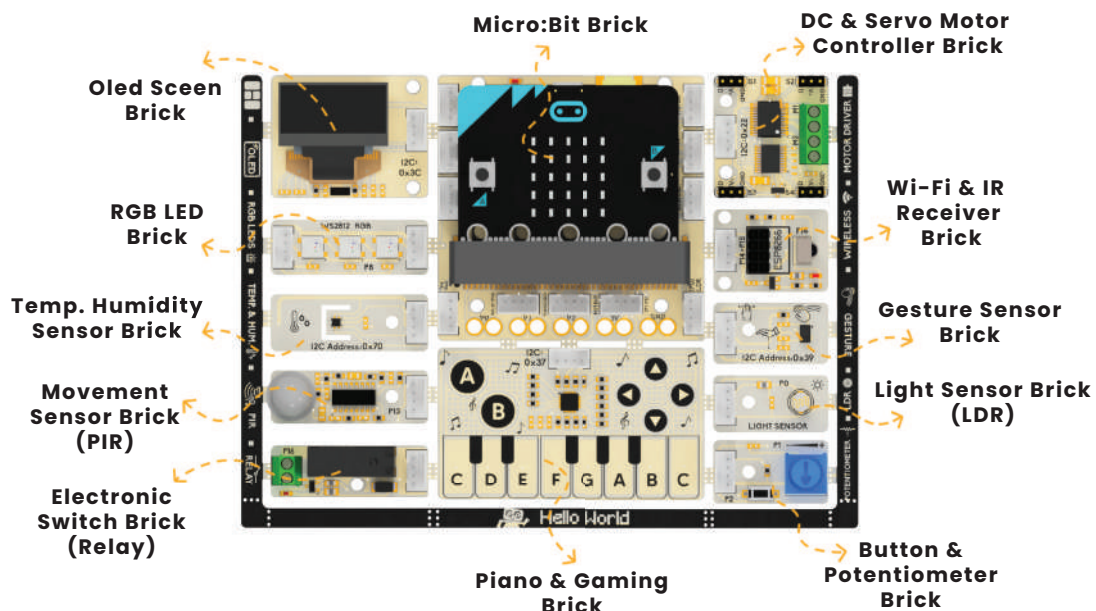
Compatible with Raspberry Pi, Micro:Bit, and Arduino ecosystems, PicoBricks supports diverse programming languages like Block-Based coding, Arduino C, Python, and MicroBlocks. It's a powerhouse for education and creativity, offering a sophisticated yet accessible platform for learners of all ages.

## Boards

### PicoBricks For Raspberry Pi



### PicoBricks For Micro:Bit



# Modules



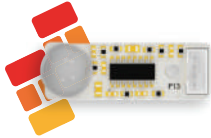
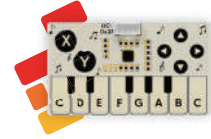
**Gesture Sensor Brick**

**Oled Screen Brick**



**Temperature Humidity Sensor Brick**

**Piano & Gaming Brick**



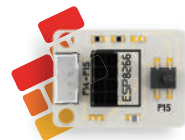
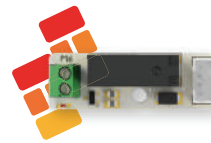
**Movement Sensor Brick (PIR)**

**Button & Potentiometer Brick**



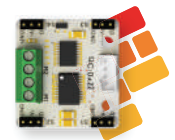
**RGB LED Brick**

**Electronic Switch Brick (Relay)**



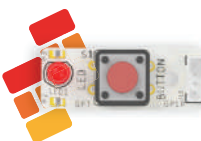
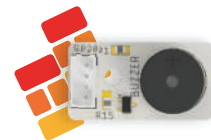
**Wi-Fi & IR Receiver Brick**

**DC & Servo Motor Controller Brick**



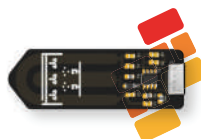
**Light Sensor Brick (LDR)**

**Speaker Brick (Buzzer)**



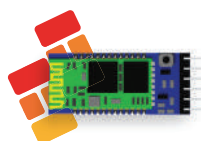
**Button & LED Brick**

**Ultrasonic Sensor**



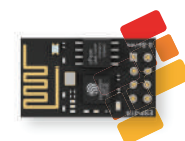
**Soil Moisture Sensor**

**Gas Sensor**



**HC05 Bluetooth Module**

**Wi-Fi Sensor**



**Sound Sensor**

**NFC Reader Module**



# PicoBricks

For Raspberry Pi





**21321**

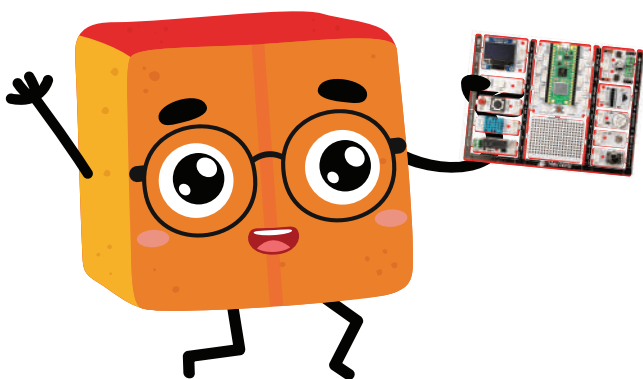
## **BASE KIT**

- Complete Learning Kit
- 12 Detachable Bricks
- No Soldering & Complex Wiring
- Block Based & Arduino & Python
- Raspberry Pi Pico W
- Project Books & Teacher Curriculum

**21323**

## **IOT EXPERT KIT**

- All Features in Base Kit
- Complete IoT Project Kit
- DIY Smart Green House Project Kit
- Wi-Fi & Bluetooth Included
- 12 Detachable Bricks & 4 External Sensor
- Project Books & Teacher Curriculum





**21324**

## **ZERO TO HERO KIT**

- All Features in IoT Kit
- Great for Education
- All in One Kit
- No Need Anything Else
- DIY Smart Car & Smart Greenhouse Projects
- Project Books & Teacher Curriculum

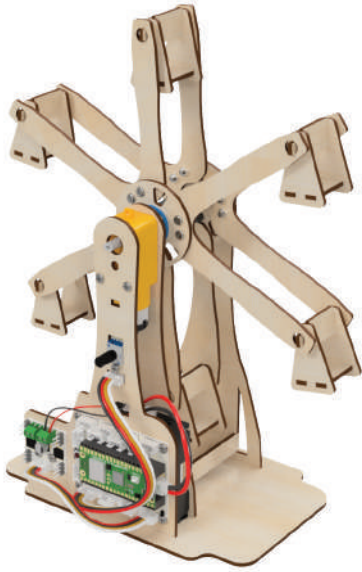
**21325**

## **CLASSROOM KIT**

- Best Solution for Classrooms
- 1 Zero to Hero for Teacher
- 11 Base Kit for Students
- Project Books & 14-Week Curriculum
- DIY Robotic Projects
- DIY IoT Projects



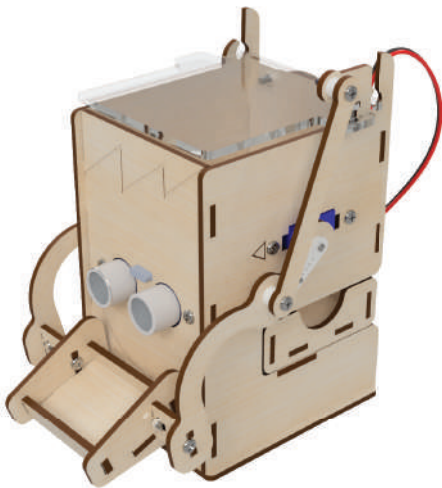
# STEM Activity Kits



**22519**

## **FERRIS WHEEL**

- DIY Wooden Programmable Ferris Wheel
- No Soldering & No Complex Wiring
- Unplugged Activities
- Enhance Fundamental Coding Skills
- Understand the Different Types of Motion in Physics Easily
- Can Be Painted & Customized



**22518**

## **MONEY BOX**

- DIY Wooden Programmable Money Box
- An Opportunity to Easily Learn Basic Mathematical Concepts
- Habit of Saving Money
- Learn The Operating Principle of the Distance Sensor
- Adapting Technology to Our Daily Routines
- Develop Problem Solving & Design Skills
- Unplugged Activities

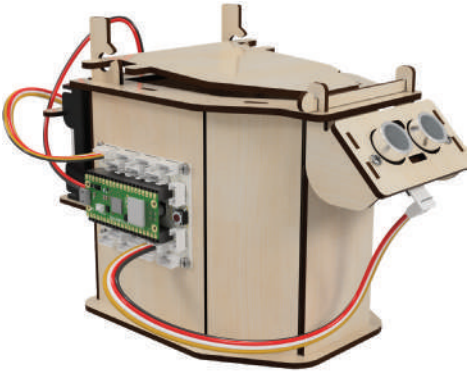


**22521**

## **SAFE BOX**

- Discover The Technology Inside The Safe Box
- Unplugged & Computing Activities
- Learn Basic Electronic Principles
- Develop Manual Skills while Assembling Wooden Parts
- Practically Learn Basic Programming Concepts
- Analytical Thinking / Problem Solving
- Understanding Why Passwords are Used

# STEM Activity Kits



**22520**

## **SMART TRASH BIN**

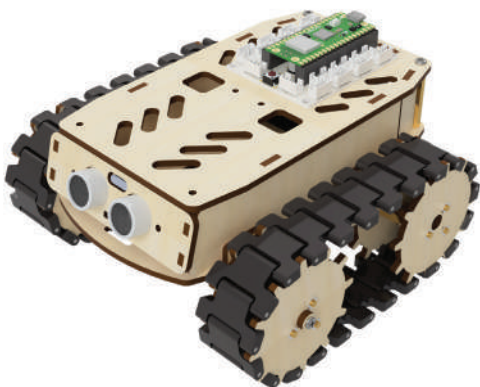
- Gain Environmental Awareness while Understanding Tech
- Improve Motor Skills while Assembling
- Be a Part of Recycling
- Combine Technology with Environmental Awareness



**22517**

## **GREENHOUSE KIT**

- Environmental Awareness & Sustainability
- DIY Remote & Autonomous Greenhouse
- Improve Motor Skills while Assembling
- Learn Greenhouse Control & Increase Efficiency
- Observe Plot Growth with PicoBricks Greenhouse Kit



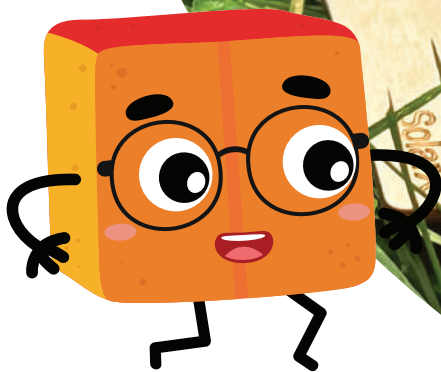
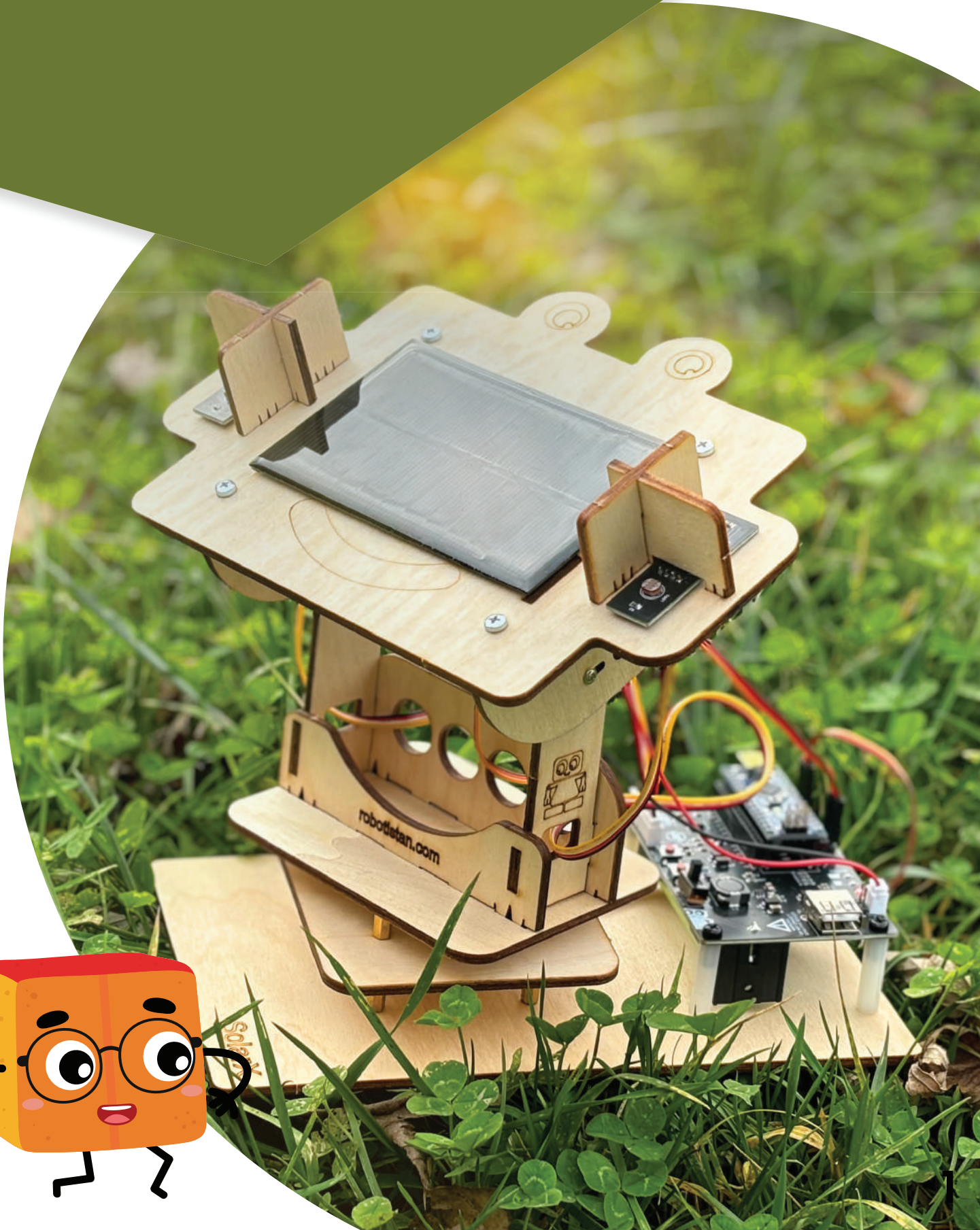
**22516**

## **MARS EXPLORER**

- Learn Basic Engineering Skills
- Easily Overcome Obstacles with Mars Explorer
- Find The Best Route Reach The Target First
- Learn How To Control DC Motors

# SolarX

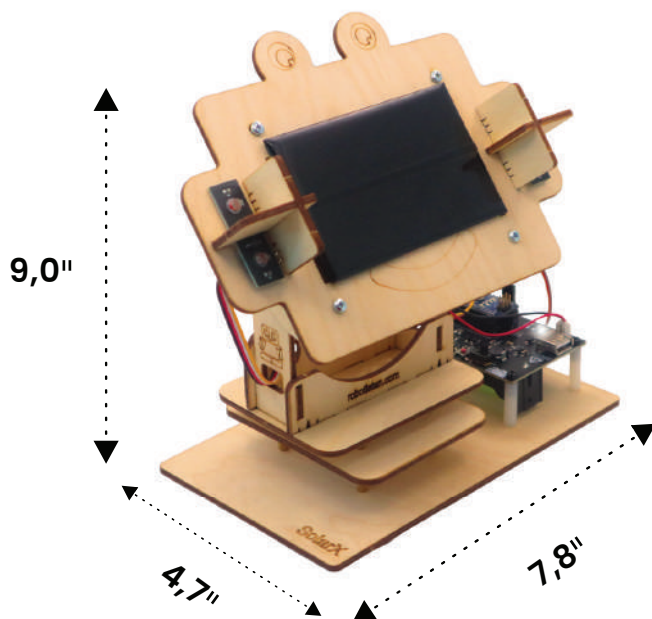
DIY STEM Solar Powered Kit



# What is SolarX?

PicoBricks SolarX is an innovative DIY kit with sensors and motors, optimized for capturing solar energy. Light sensors enable the solar panel to auto adjust to the best angle throughout the day, ensuring maximum sunlight exposure. Featuring a USB output, it can charge phones or power devices.

The Arduino-compatible Nano board makes SolarX ideal for developing coding skills and engaging in practical DIY projects, while also promoting STEM education and renewable energy awareness.

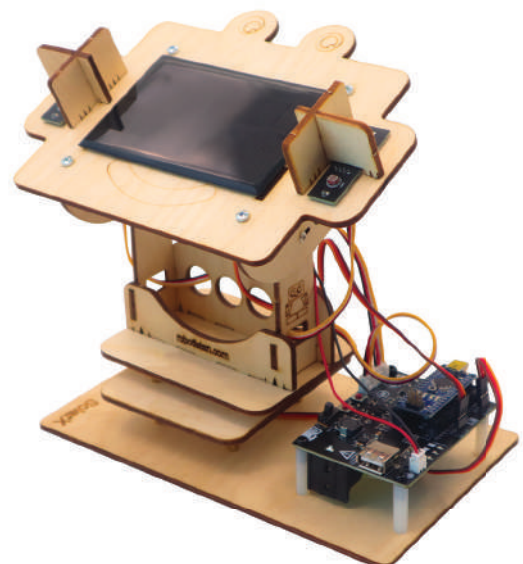


**22613**

## **SOLARX**

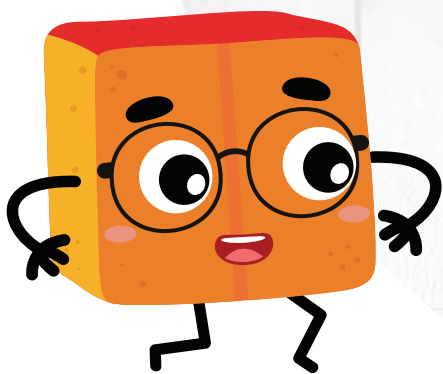
- Arduino Compatible Nano Board
- 2 Servo Motors
- 4 Light Sensors
- 1500 mAh Rechargeable Battery

- Charge Your Phone with Solar Energy
- Best DIY Kit for Renewable Energy
- Suitable for Home & School Use
- Can Be Painted on Customized



# REX 8

8in1 Robot Kit



# What is REX8?

PicoBricks REX Robotic Kit is an educational kit allowing for 8 different robot designs, featuring an ESP32-based board that eliminates complex wiring. Suitable for both home and school use.

It supports block-based, Arduino and Python programming languages. With user-friendly guides, it enables easy creation of fun and educational projects.

**SUMOBOT**



**TRACKERBOT**



**SONICBOT**

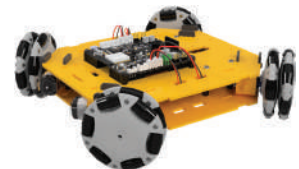


**ARMBOT**

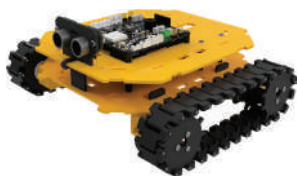


**8 in 1**

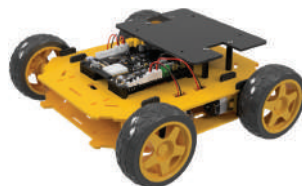
**OMNIBOT**



**ROVERBOT**



**WIBOT**



**BALANCEBOT**





## All Terrain Robotic Kit

### Block-Based & Arduino & Python Programming Interface



### Bluetooth & Wifi Remote Control

### Easy Setup Guides for All Robots

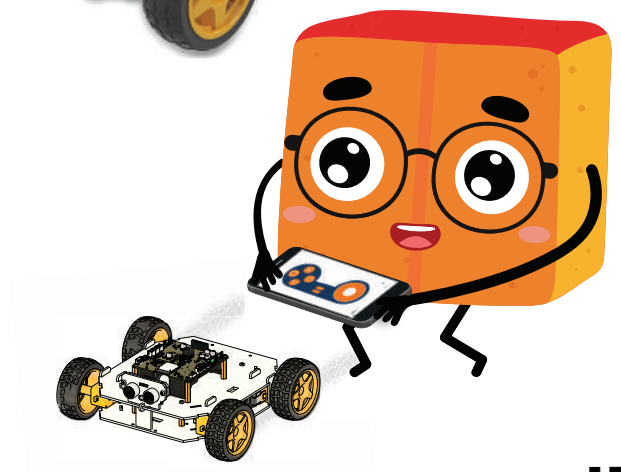


# Product

**20444**

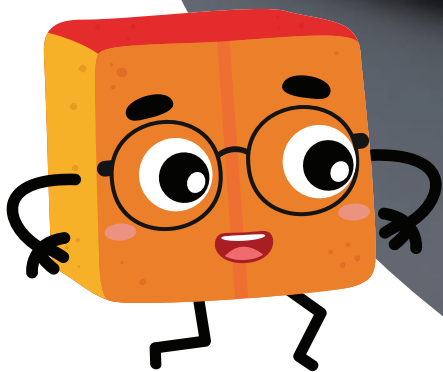
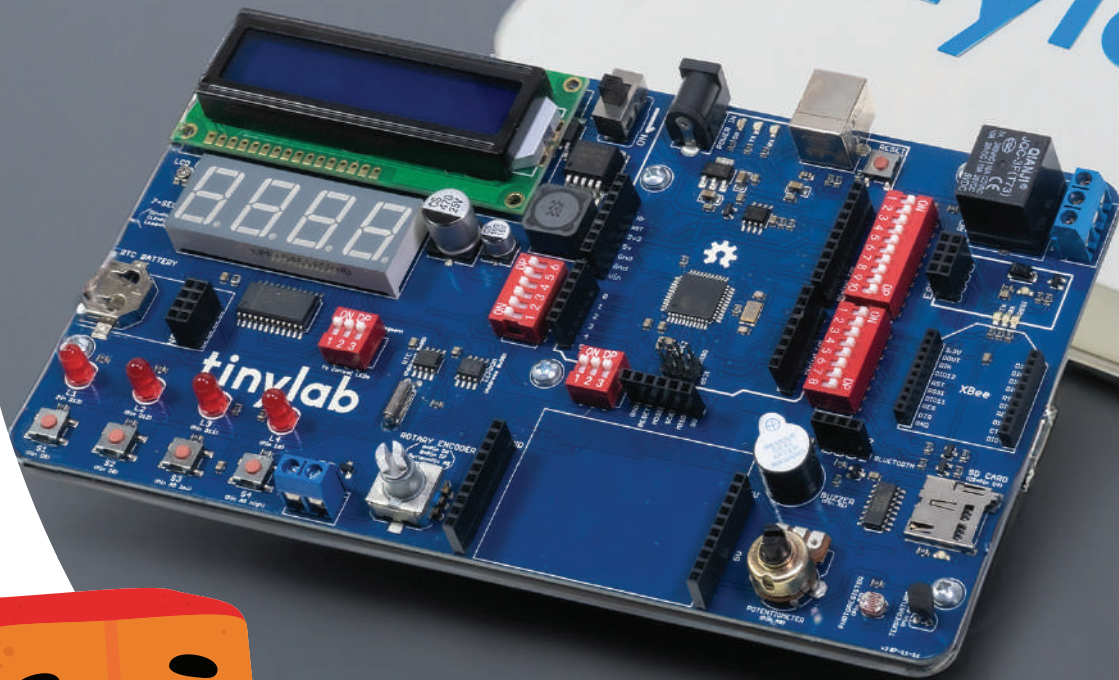
## **REX 8 IN 1 ROBOT KIT**

- 8 Different DIY Robotic Project
- Learn Coding with REX
- Suitable for All Environments with Crawler, Omni & Road Wheel
- Internal 2 Rechargeable Batteries
- Wi-fi & Bluetooth Control
- Comprehensive Educational & Project Contents



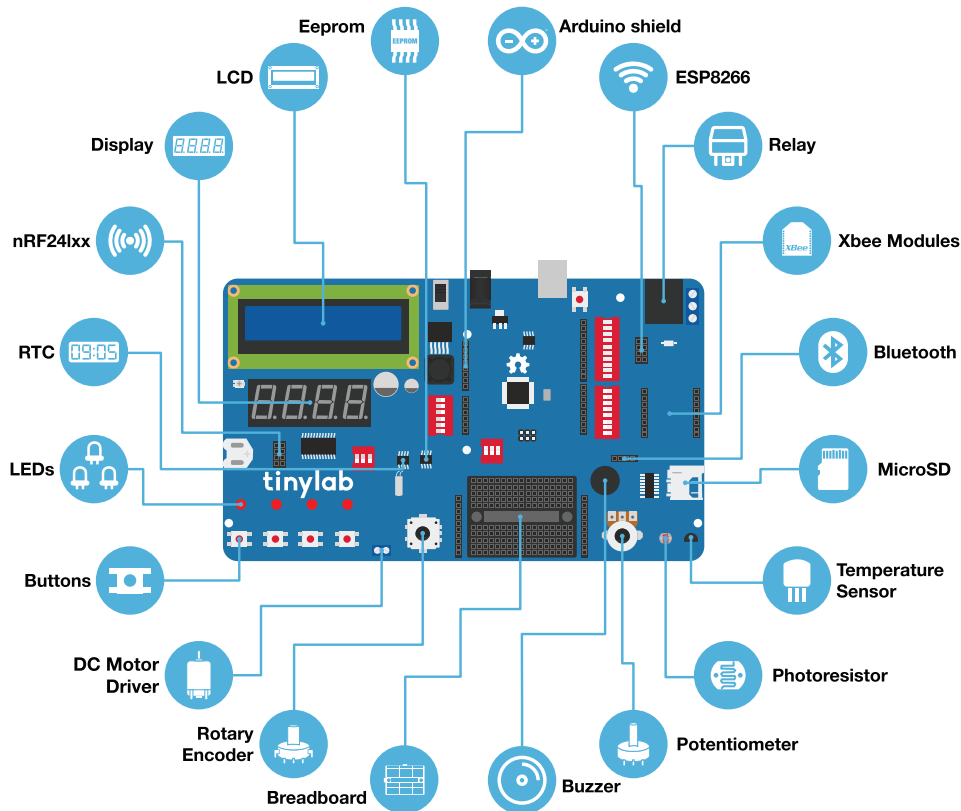
# Tinylab

Arduino Compatible Starter Kit



# What is Tinylab?

Tinylab is a comprehensive yet simple Arduino starter kit, ideal for those new to Arduino projects and seeking rapid prototyping capabilities. It facilitates a wide range of projects, from basic to IoT, making even complex ideas easy to realize. Tinylab is uniquely suitable for beginners with its support for Arduino programming language and block coding, as well as for professionals seeking a streamlined project experience. It's an exceptional kit for effortlessly bringing your creative concepts to life.

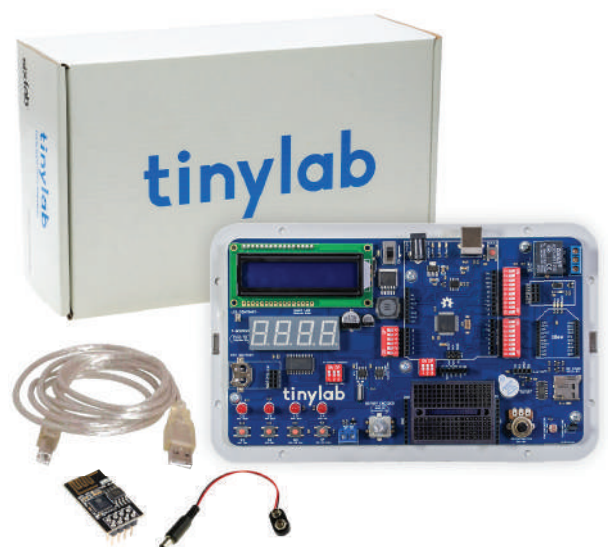


## Product

**16333**

### **TINYLAB**

- Arduino Based Project Kit
- 20 Integrated Modules
- Wi-Fi & Bluetooth
- Compatible for Arduino Shields
- No Soldering & Complex Wiring
- Plastic Enclosure

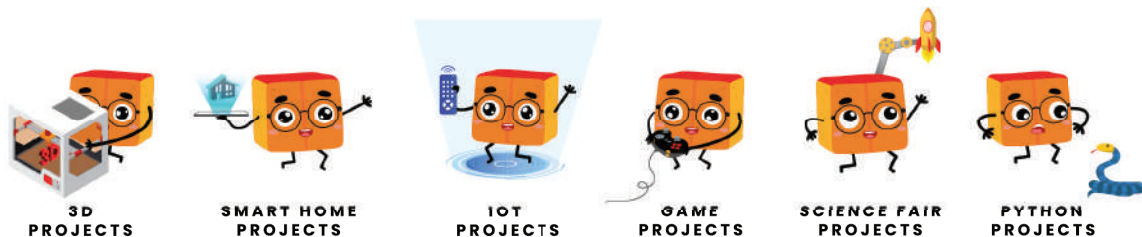
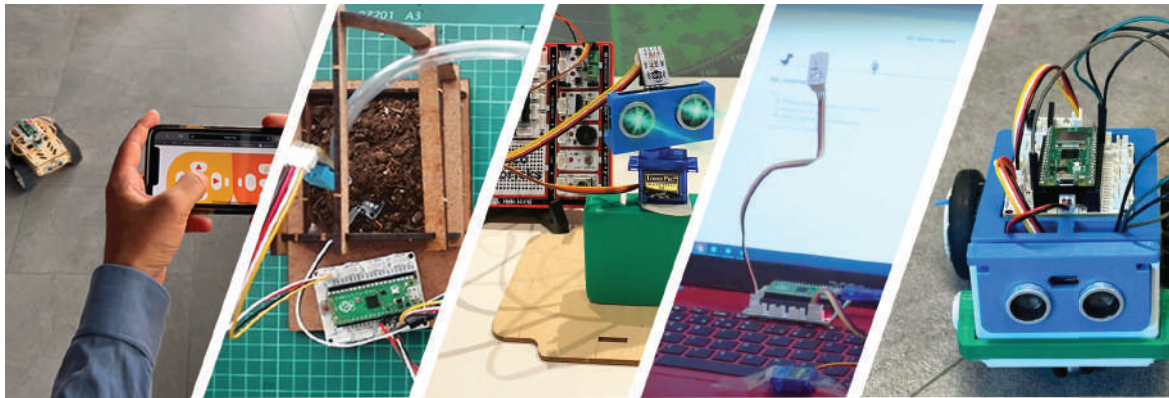


# Programming Tools & Content Library

PicoBricks prioritizes user experience, designing products to support a range of programming languages. It offers a content and code library compatible with block coding interfaces like MicroBlocks, and programming languages including Arduino and Python.

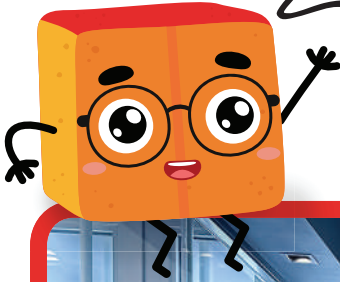
PicoBricks has developed practical BricksIDE, with simulator support for project development without physical hardware.

Comprehensive educational books and materials are provided for an enhanced learning journey with its products.



# Team

See You Again!!



# Resellers





**pico  
bricks**

 / picobricks

