

INTRODUCTION

Join DFRobot Discord Group,
Get Free Silicone Case



UNIHAKER is a single-board computer that brings you brand new experience. It features a 2.8-inch touchscreen, Wi-Fi and Bluetooth. It is equipped with light sensor, accelerometer, gyroscope and microphone. With built-in co-processor, it is able to communicate with various analog/digital/I2C/UART/SPI sensors and actuators.

UNIHAKER brings a whole new experience for developers with its pre-installed software, allowing for an incredibly fast and easy start. Featuring a built-in Jupyter Notebook (a browser-based programming environment), developers can program the single board computer using a smartphone or tablet.

Of course, just like other single board computers, UNIHAKER supports VS Code, VIM, and Thonny. The integrated PinPong control library allows developers to directly control UNIHAKER's built-in sensors and hundreds of connected sensors and actuators using Python.

The built-in SloT service on UNIHAKER allows users to store data through the MQTT protocol and provides real-time web data access. The best part is that all data is stored within the device itself.

Compact, feature-rich, and user-friendly, UNIHAKER offers an innovative development experience for learning, coding, and creating. Unleash your imagination and embark on a new journey with UNIHAKER.

UNIHIKER

A single board computer brings brand new experience.



Built-in 2.8-inch Touch Screen

Enables you to visualize sensor data in the form of charts, graphs, and even dynamic animations.



Nothing special, it's touchable



Black and white, it's colorful

Incredibly Fast and Easy Start



01

Connect to a computer

02 Start to play

- Coding
- Configure network
- Run Linux Commands



Using Python to Sense and Control

Software

The integrated PinPong control library allows developers to directly control hundreds of sensors and actuators using Python.



Hardware

With built-in co-processor, it is able to communicate with various analog/digital/I2C/UART/SPI sensors and actuators.



Built-in IoT service

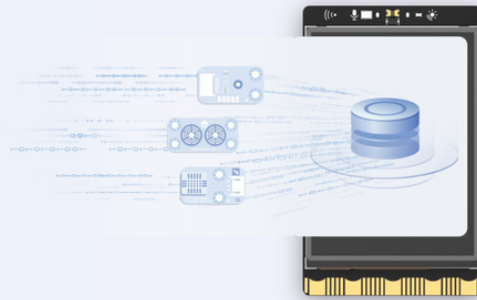
01 IoT Service

The built-in IoT service on UNIHKER allows users to store data through the MQTT protocol and provides real-time data access via web browser.



02 On-Device data

All data is stored on-device.



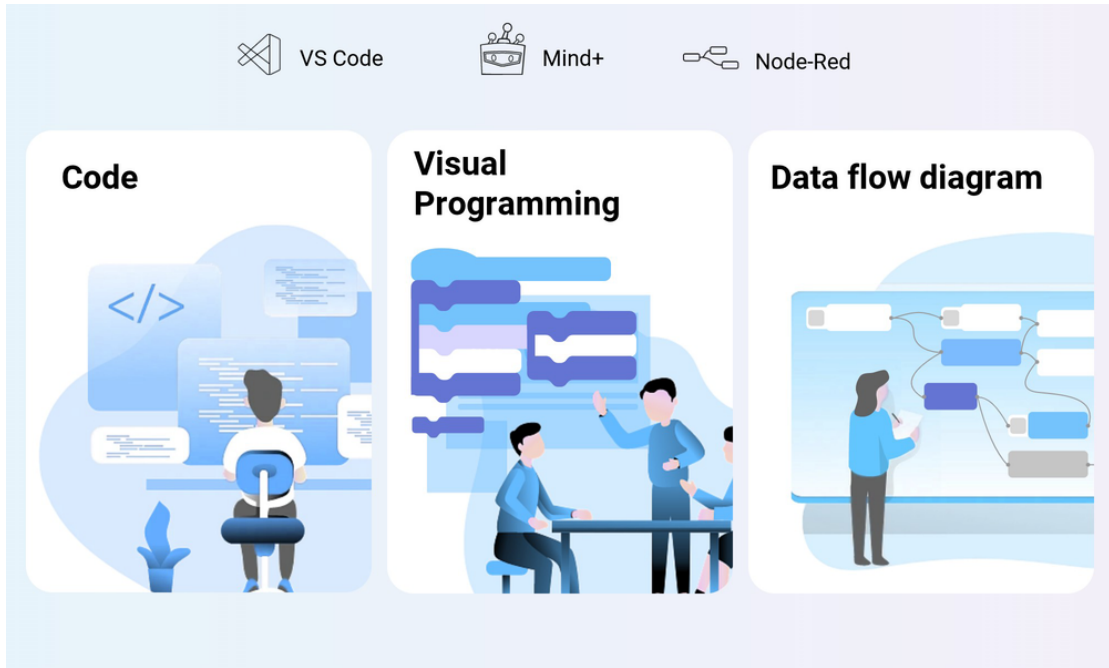
Can be Programmed Wirelessly

UNIHKER can be programmed from a computer, an iPad, even a phone.

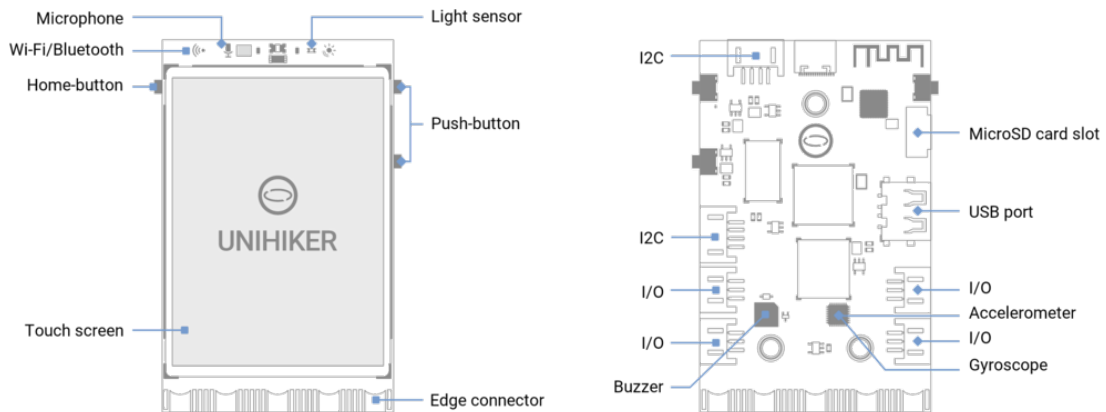
It also supports Hotspot, you can play it from anywhere.



Supports Popular Coding Software



Rich Interfaces and High Expandability





APPLICATIONS



AIoT

Robot

STEM

SPECIFICATION

- CPU: Quad-Core ARM Cortex-A35, up to 1.2GHz
- RAM: 512MB
- Flash: 16GB
- OS: Debian
- Wi-Fi: 2.4G
- BT: Bluetooth 4.0
- Screen: 2.8inch, 240×320, Touch Screen
- MCU: GD32VF103
- Sensor: Button, Microphone, Light Sensor, Accelerometer Sensor, Gyroscope Sensor
- Actuator: Led, Buzzer
- Port: USB Type-C, USB-A, Gravity 3pin&4pin port, Edge connector

- Power: 5V 2A for USB Type-C
- Size: 51.6mmx83mmx13mm

PROJECTS

1. Project: [How to Make a Fruit Classification Project with UNHIKER](#)

Introduction: UNHIKER supports running machine learning, neural networks, and other AI-related Python libraries. With its ability to process image information, it is perfect for computer vision applications. In this tutorial, we will implement a fruit classification project using UNHIKER and a USB camera.



2. Project: [How to Build an Intelligent Car System with UNHIKER](#)

Introduction: Equipped with a variety of on-board hardware and expansion interfaces, UNHIKER can control a wide range of sensors and actuators with ease. In this tutorial, we will demonstrate the implementation of an intelligent car system using UNHIKER and Gravity modules.



DOCUMENTS

- [Getting Started](#)
- [Product wiki](#)
- [FAQ](#)
- [Website](#)
- [UNIHKER Graphical Python Tutorial](#)
- [CE Certifications](#)
- [FCC Certifications](#)
- [RoHS Certifications](#)

SHIPPING LIST

- UNIHKER Single Board Computer x1
- Type-C USB cable x1
- Double Sided PH2.0-3P white 20cm silicone wire x4
- Double Sided PH2.0-4P white 20cm silicone wire x2