

## ARDUINO SMART HOME IoT KIT

MODEL NUMBER : GT-ARDSH



## APP Control



### KEY FEATURES

This Smart Home Learning Kit simulates the real smart home and demonstrates the cozy and comfortable life for people.

This system adopts PLUS main control board and multiple modules, including 1602 LCD, photocell sensor, analog gas(MQ-2) sensor, PIR motion sensor, yellow LED, servo, steam sensor and Bluetooth.

In fact, Bluetooth controls everything in smart home: light intensity, humidity, flammable gas concentration, doors opening and closing. Everything is controlled via APPs on smart phones/iPad and will be displayed on 1602 LCD in real time.

We totally provide 3 programming languages: C language, Mixly and Scratch. These languages hit the top list in programming, which is easy and convenient to use and understand.

### TECHNICAL SPECIFICATIONS

- Serial communication interface: D0 is RX, D1 is TX
- PWM interface (pulse width modulation): D3 D5 D6 D9 D10 D11
- External interrupt interface: D2 (interrupt 0) and D3 (interrupt 1)
- SPI communication interface: D10 is SS, D11 is MOSI, D12 is MISO, D13 is SCK
- IIC communication port: A4 is SDA, A5 is SCL
- Bluetooth protocol: Bluetooth Specification V4.0 BLE
- No byte limit in serial port Transceiving
- In open environment, realize 100m ultra-distance communication with iphone4s
- USB protocol: USB V2.0
- Working frequency: 2.4GHz ISM band
- Modulation method: GFSK(Gaussian Frequency Shift Keying)
- Transmission power: -23dbm, -6dbm, 0dbm, 6dbm, can be modified by AT command.
- Sensitivity:  $\leq -84\text{dBm}$  at 0.1% BER
- Transmission rate: Asynchronous: 6K bytes ; Synchronous: 6k Bytes
- Security feature: Authentication and encryption
- Supporting service: Central & Peripheral UUID FFE0, FFE1
- Power consumption: Auto sleep mode, stand by current 400uA~800uA, 8.5mA during transmission.
- Power supply: 5V DC
- Working temperature:  $-5$  to  $+65$  Centigrade

### Manuals :

(1) All manuals are written in English

### General Terms:

- (1) Accessories will be provided where applicable.
- (2) Manuals be provided where applicable.
- (3) Designs & Specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

### Warranty:

1 Years

### ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
ARDUINO SMART HOME IoT KIT	GT-ARDSH	7120-060

\* Proposed design only, subject to changes without any notice.