



# CrowPanel

## IPS Round HMI Display

FCC ID: 2BDNA-AP05



SKU: DHEO3921D



SKU: DIS12824D



SKU: DHR55146D



SKU: DHE38128D

## User Manual

Please read this user manual carefully before use and keep it properly for future reference.

# 1.28 Inch IPS Rotary HMI Display



SKU: DHE38128D

5V  
D-  
D+  
GND

## USB IN (5V)

Power supply

5V  
IO4  
IO12  
RX  
TX  
SCL  
SDA  
D-  
D+  
GND  
GND

## FPC

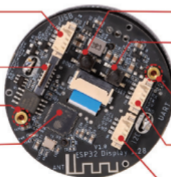
Used for data transmission

## M2.5

Screw interface

## ESP32-S3R8

Wi-Fi and BT chipset with a main frequency up to 240 MHz, 512 KB SRAM, 8 MB PSRAM, and supports external 16 MB Flash



## Boot Button

To enter flash mode, press and hold the Boot button, then connect the device to your computer with a USB cable

## Reset Button

Used for restarting devices

## M2.5

Screw Interface

## UART

Used for data transmission

## I2C

Used for data transmission

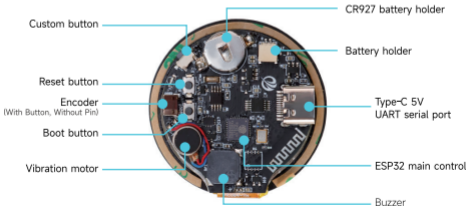
RX  
TX  
5V  
GND

SCL  
SDA  
5V  
GND

## 1.28 Inch IPS Round HMI Display



SKU: DIS12824D



# 1.46 Inch IPS Rotary HMI Display



SKU: DHR55146D

5V  
D-  
D+  
GND

5V  
5V  
IO4  
IO12  
RX  
TX  
SCL  
SDA  
D-  
D+  
GND  
GND

**USB IN (5V)**

Power supply

**FPC**

Used for data transmission

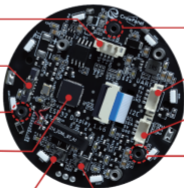
**M2.0**

Screw interface

**ESP32-S3R8**

**Reset Button**

Used for restarting devices



**M2.0**

Screw interface

**UART**

Used for data transmission

**I2C**

Used for data transmission

**M2.0**

Screw interface

**Boot Button**

To enter flash mode, press and hold the Boot button, then connect the device to your computer with a USB cable

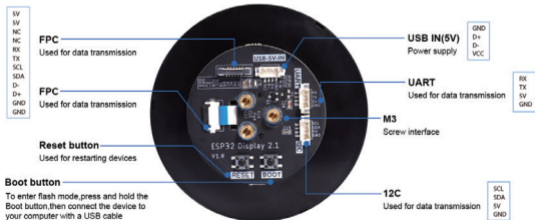
RX  
TX  
5V  
GND

SCL  
SDA  
5V  
GND

## 2.1 Inch IPS Rotary HMI Display



SKU: DHE03921D



# Parameters

Product	1.28 Inch IPS Rotary HMI Display	1.46 Inch IPS Rotary HMI Display
MCU	ESP32-S3R8	
System memory	512KB SRAM、 8M PSRAM	
Storage	16M Flash	
Wireless Communication	BLE & Bluetooth 5.0、 Support 802.11a/b/g/n, 2.4GHz	
Rotary Encoder	Support	Support
Power Input	5V/1A	
Interface	1xUSB IN、 2xFPC、 1xUART、 1xI2C	1xUSB IN、 2xFPC、 1xUART、 1xI2C
Size	1.28"	1.46"
Screen Type	IPS	
Touch Type	Capacitive Touch	
Resolution	240*240	360*360
Dimension	48*48*33mm	60*60*27.5mm
Weight	50g	60g
Package List	1x ESP32 Display-1.28 inch Rotary Display 1x 4pin Dupont Cable 1x 50 cm MX1.25 to USB Cable	1x ESP32 Display-1.46 inch Rotary Display 1x 50 cm MS1.25 to USB Cable 1X 4pin Dupont Cable

# Parameters

<b>Product</b>	2.1 Inch IPS Rotary HMI Display	1.28 Inch IPS Round HMI Display
<b>MCU</b>	ESP32-S3R8	ESP32-C3
<b>System memory</b>	512KB SRAM、 8M PSRAM	400 KB SRAM (16 KB for cache)、 8 KB SRAM in RTC、 384 KB ROM
<b>Storage</b>	16M Flash	/
<b>Wireless Communication</b>	BLE&Bluetooth 5.0、 Support 802.11a/b/g/n、 2.4GHz	
<b>Rotary Encoder</b>	Support	No
<b>Power Input</b>	5V/1A	5V
<b>Interface</b>	1xUSB IN、 2xFPC、 1xUART、 1xI2C	1xUSB-C
<b>Size</b>	2.1"	1.28"
<b>Screen Type</b>	IPS	TFT LCD, IPS
<b>Touch Type</b>	Capacitive Touch	Capacitive Touch
<b>Resolution</b>	480*480	240*240
<b>Dimension</b>	79*79*30mm	42*42*9.8mm
<b>Weight</b>	80g	15g
<b>Package List</b>	1x ESP32 Display-2.1 inch Rotary Display 1x 50 cm MX1.25 to USB Cable 1X 4pin Dupont Cable	1x1.28 Inch IPS Round HMI Display (With Battery) 1xUSB-A to USB-C Cable

## Expansion Resources

---

- Wiki
- Code lib
- Github
- ESP32-S3/C3 Datasheet
- 3D File



For More Details,  
Please Scan the QR Code

## Safety Instructions

---

To ensure safe use and avoid injury or property damage to yourself and others, please follow the safety instructions below.

- Avoid exposing the screen to sunlight or strong light sources to prevent affecting its viewing effect and lifespan.
- Avoid pressing or shaking the screen hard during use to prevent loosening of internal connections and components.
- For screen malfunctions, such as flickering, color distortion, or unclear display, stop use and seek professional repair.
- Before repairing or replacing any equipment components, make sure to turn off the power and disconnect from the device.

## FCC WARNING

---

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.



○————○  
MAKE YOUR MAKING EASIER



| Made In China