



# ESP32-P4 HMI AI Display

## CrowPanel Advance Series



## User Manual

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

# Package List

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The following list diagram is for reference only. Please refer to the actual product inside the package for details.



1 x ESP32-P4 HMI AI Display



1 x User Manual



1 x USB-A to USB-C Cable



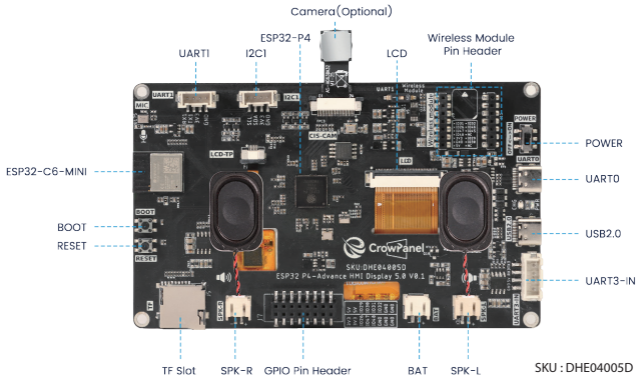
1 x Crowtail/Grove to 4pin  
DuPont Cable



1 x (Optional) Wireless Module-ESP32-H2/Wireless Module-WiFi  
Halow/Wireless Module-nRF2401/Wireless Module-LoRa

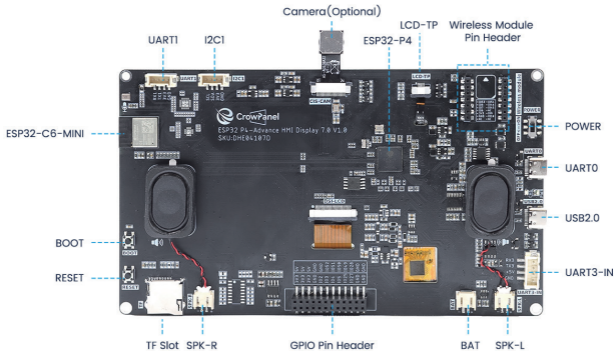
# 5 Inch HMI Display Buttons and Interfaces

Screen appearance varies by model, and diagrams are for reference only. Interfaces and buttons are silk screen labeled, use actual product as reference.



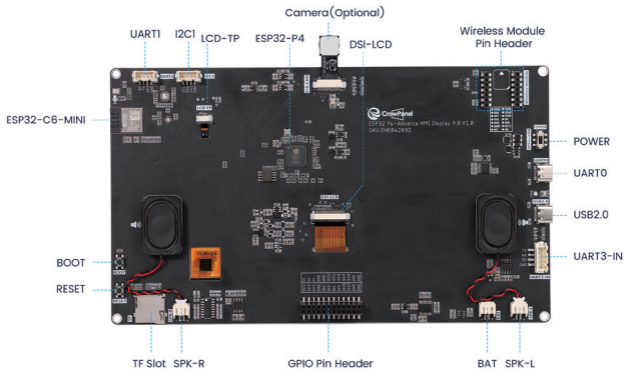
# 7 Inch HMI Display Buttons and Interfaces

Screen appearance varies by model, and diagrams are for reference only. Interfaces and buttons are silk screen labeled, use actual product as reference.



# 9 Inch HMI Display Buttons and Interfaces

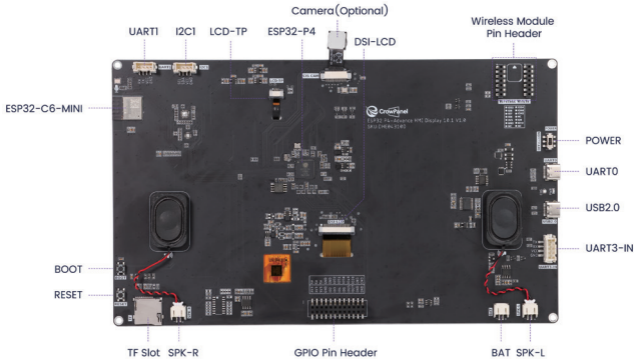
Screen appearance varies by model, and diagrams are for reference only. Interfaces and buttons are silk screen labeled, use actual product as reference.



SKU : DHE04209D

# 10.1 Inch HMI Display Buttons and Interfaces

Screen appearance varies by model, and diagrams are for reference only. Interfaces and buttons are silk screen labeled, use actual product as reference.



SKU : DHE04310D

# Parameters

	5"	7"	9"	10.1"
MCU	ESP32-P4,400 MHz, 768 KB L2MEM (HP) , 128 KB ROM (HP) 32 KB SRAM (LP), 16 KB ROM (LP) 8 KB SPM, 32 MB PSRAM, 16 MB Flash			
Wireless Chip	ESP32-C6-MINI, 160MHz, 512 KB SRAM(HP), 16 KB SRAM(LP), 320 KB, 8 MB Flash			
Wireless Communication	Support 2.4GHz(Wi-Fi6), 802.11 a/b/g/n, Bluetooth 5.3 and BLE			
AI-Compatible	Support(include MIC, Speaker)			
Camera-Compatible	Optional			
ReplaceableModule	(Optional) Wireless Module-ESP32-H2/Wireless Module-WiFi Halow/ Wireless Module-nRF2401/Wireless Module-LoRa			
Interface	1*UART0, 1*UART1, 1*UART3-IN, 1*I2C, 1*USB2.0, 1*BAT, 2*SPK 1*TF Slot, 1*GPIO Pin Header, 1*Camera Header			
Resolution	800*480	1024*600		
Screen Type	IPS, Capacitive Touch			
Brightness	400 cd/m2(Type)			

## Expansion Resources

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- Wiki
- IDF User Lessons
- Arduino User Lessons
- ESP32-P4 Datasheet
- 3D File

For More Details, Please  
Scan the QR Code.



## Safety Instructions

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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.