
RK3543A-Technical Specification

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1.Parameter List

Product Specification		
Model Description	RK3543A(400*272)Standard model (DDR 512M) with RTP RK3543A-W(400*272)RTP with WIFI RK3543A-WB(400*272)RTP with WIFI 、 Bluetooth RK3543A(400*272)CTP RK3543A(400*272)CTP with WIFI RK3543A(400*272)CTP with WIFI 、 Bluetooth RK3543A(400*272)High-rated(DDR 1G) with RTP RK3543A-W(400*272)RTP with WIFI RK3543A-WB(400*272)RTP with WIFI 、 Bluetooth RK3543A(400*272)CTP RK3543A(400*272)CTP with WIFI RK3543A(400*272)CTP with WIFI 、 Bluetooth	
Color LCD/TP	Resolution	4.3 inch 480RGB*272
	Brightness	300 (TYP)
	Contrast	500:1
	Effective Perspective	70/70/50/70
	TP	Resistive Capacitive 5 points
CPU	Allwinner A33 1.5GHz quad-core processor	
GPU	3D (Mail 400 MP2) + 2D	
Memory	512M or 1GB DDR3; Standard 512MB	
Local Storage	EMMC Flash ,4GB/8GB/16GB/32GB; Standard 4GB	
Supported Operating Systems	Android 6.0	
Audio/Video	1080P FHD; MPEG2, H.264, VC1, MPEG4/Xvid/DivX6, H.263, MJPEG, VP6/WebM VP8, H.264 MVC, RM, RMVB	
Extended memory	TF card	
WIFI	WIFI 802.11 a/b/g/n (Optional)	
Bluetooth	BT4.2 (Optional)	
USB	USB2.0 HOST*2; OTG*1	
4G/GPS	Extend 4G/GPS module (Optional)	

UART	RS485*1 RS232*1(multiplexed with TTL,Default RS232) UART TTL*1
Power	8-26V,Standard 12V ; < 6W
Product Size	
Viewing Area	95*54 mm
Overall Size	145.6mm*96.3mm*23.9mm
Hole size	140.0mm*90.5mm

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2.Product appearance



Front view



Back view

3. Hardware Interfaces

3.1 Performance Overview

◆ Electrical performance parameters

Properties	Conditions	Min	TYP	Max	Unit
Power Voltage	—	8.0	12.0	26	V
Operation Current	VCC=+12V, backlight brightness maximum, running test game load application	—	350	—	mA
	VCC=+12V, backlight off	—	100	—	mA

◆ Operating environment and reliability parameters

Properties	Conditions	Min	TYP	Max	Unit
Working Temperature	60%RH at 12V voltage	-10	25	60	°C
Storage Temperature	—	-20	25	70	°C
Working Humidity	25°C	10%	60%	90%	RH
Protective Paint	—	—	None	—	—
ESD protection Level	Class 3				

◆ Interface performance parameters

Properties	Conditions	Min	TYP	Max	Unit
UART RS232-1 Baud rate	User set	300	—	115200	bps
Serial port output level	Output 1	—	0	—	V
	Output 0	—	3.3	—	V
Serial port input level	Input 1	—	-5.0	—	V
	Input 0	—	5.0	—	V

UART UART1 UART2 Baud rate	User set	300	—	115200	bps
Serial port output level	Output 1	—	3.3	—	V
	Output 0	—	0	0.3	V
Serial port input level	Input 1	—	3.3	—	V
	Input 0	0	—	0.5	V
UART RS485 Baud rate	User set	300	—	57600	bps
Serial port level V_AB	Output 1	2.5	5.0	—	V
	Output 0	—	-5.0	-2.5	V
Serial port level V_AB	Input 1	0	2.5	—	V
	Input 0	—	-2.5	-0.2	V

3.2 Power Interfaces

- Provide a power supply interface, through the 8PIN 2.0mm pitch with locking socket connection, recommended 12V DC power access, can support a wide voltage range of 8V ~ 26V, the terminal model: HY-8Y.



Pin	Description	Remark
1	VCC	12V Input
2	UART2_TX	Equipment name: /dev/ttyS2
3	RS485_A	Equipment name: /dev/ttyS3
4	DOUT (UART1/RS232-1)	Equipment name: /dev/ttyS1
5	DIN (UART1/RS232-1)	
6	RS485_B	—
7	UART2_RX	Equipment name: /dev/ttyS2—
8	GND	—

Shorting instructions: UART1 is RS232 level by default, J2 pad is TTL level after shorting.



3.3 USB Port

- There are 3 USB channels, 1 of which is OTG, connected through MICRO USB holder.



- The other 2 channels are USB HOST.
- a) 1 of the channels is connected via a vertical USB holder.



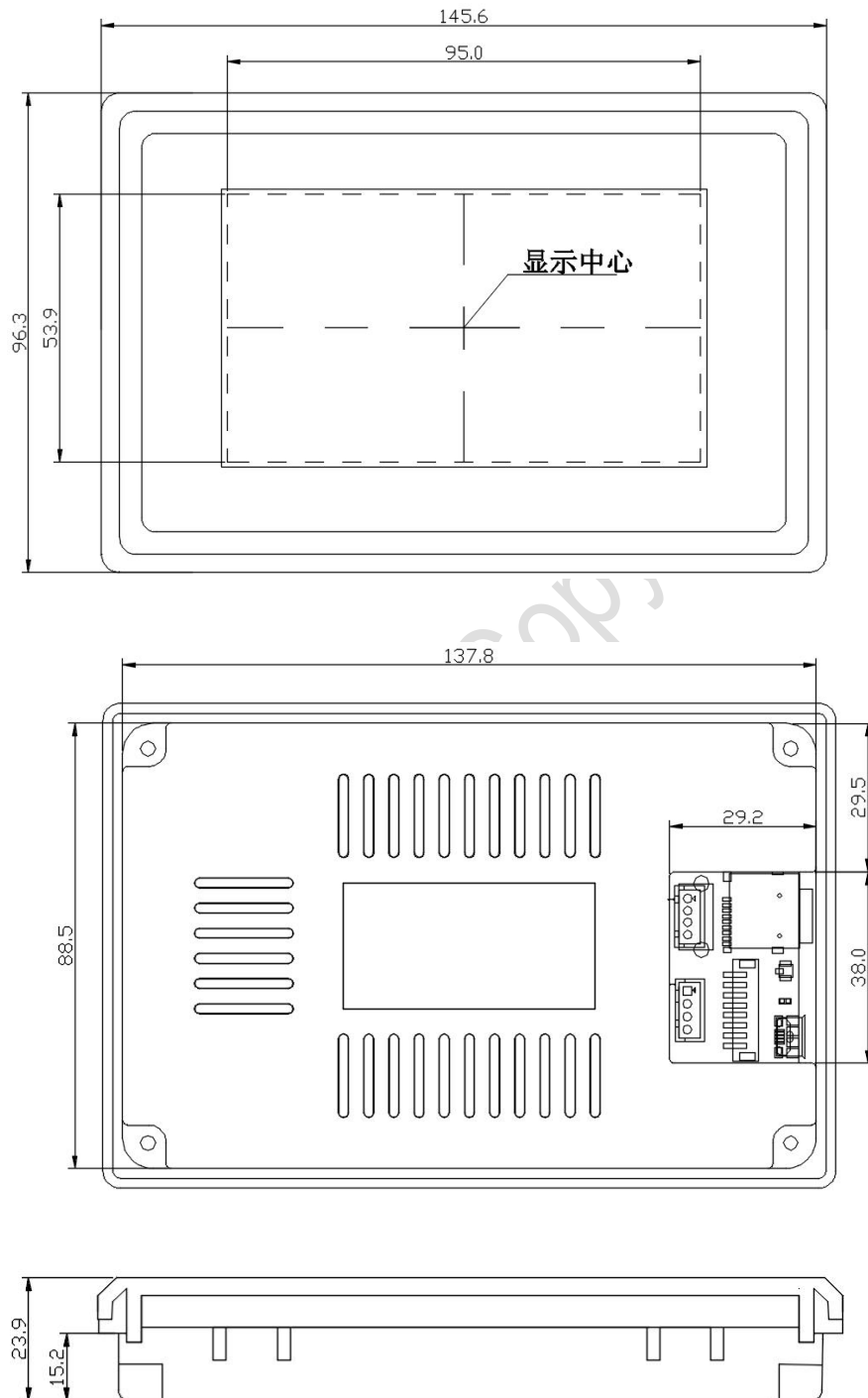
- b) The other 1 way is connected through a 4PIN 2.54mm pitch plug, model number: XH-4Y.



Pin	Description	Pin	Description
1	5V	2	D-
3	D+	4	GND

4.Dimension drawing

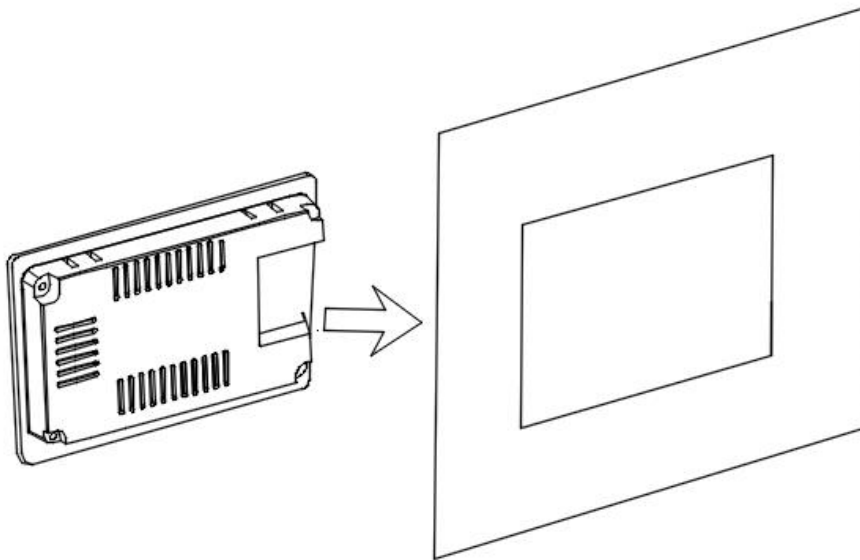
4.1Overall dimension drawing



1. 单位: mm
2. 未标注公差为 $\pm 0.3\text{mm}$ 。
3. 虚线标注为有效显示区域。

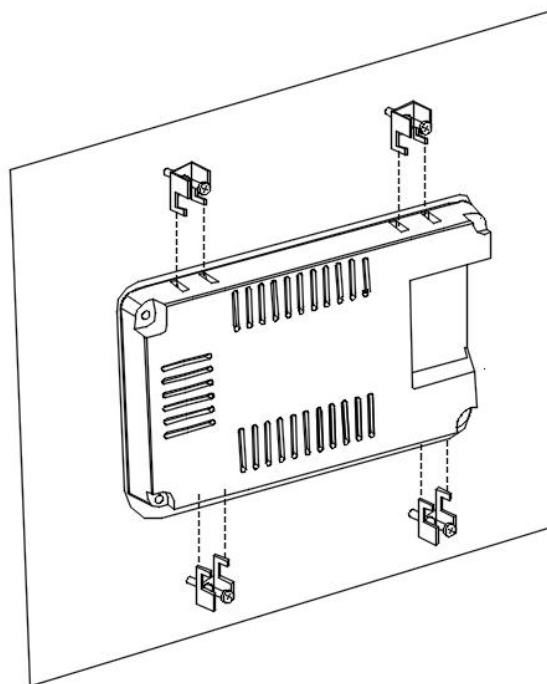
4.2 Mounting method

Step 1: Embed the device in the user panel window



Recommended opening size 140*90.5 (unit: mm)

Step 2: Place the snap into the snap mounting slot and tighten the screws



With: Packaging and physical dimensions

Size				
Product dimensions	145.6(L)x96.3(W)x23.9mm			
Net product weight	190g			
Packaging standards				
Box type	Box size	Number of storeys layers	Quantity/layers	Total
Aircraft Box	27cm(L)×16cm(W)×5cm(H)	1	1	1
Box 2	25cm(L)×20cm(W)×18cm(H)	1	4	4
Box 3	30cm(L)×25cm(W)×20cm(H)	1	6	6