

# DMG12800C070\_32WTC





#### Features:

- Commercial Android intelligent display terminal based on RK3566, running Android 11 operating system.
- 7.0-inch, 800\*1280 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, Capacitive touch.
- Compatible with WIFI, bluetooth, microphone, camera and other rich peripherals.
- Available for USB and SD card updates.
- Available for downloading Android general apps to realize functions such as WiFi, wired internet, browsing, music and video playback, data copy, etc.
- Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.

# Master Control Parameters

Properties	Parameters	
Motherboard level	Commercial	
СРИ	RK3566, Cortex-A55, quad-core	
os	Android 11	
FLASH	8Gbytes EMMC	
RAM	2Gbytes DDR4	

## Display Parameters

Properties	Parameters	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide viewing angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best View: symmetrical
Active Area (A.A.)	94.20mm (W)*150.72mm (H)	800*1280 Pixel
Visible Area (V.A.)	94.60mm (W)*151.12mm (H)	800*1280 Pixel
Resolution	800*1280 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥20000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	300nit	100 levels adjustment(It's not recommend to set brightness to 1%~30% of the maximum, which may lead to LCD flicker.)

Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.

### Voltage & Current

Properties	Conditions	Min	Тур	Max	Unit
Power Voltage	100,	7.0	12.0	23	٧
Operation Current	VCC = +12V, Backlight on	18	260	8=8	mA
	VCC = +12V, Backlight off	72	110		mA

# Reliability Test

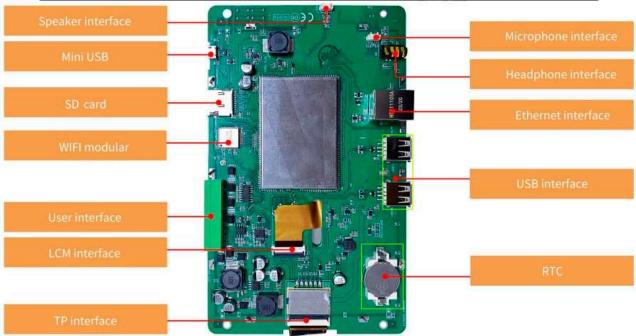
Properties	Conditions	Min	Тур	Max	Unit
Working Temperature	60%RH at 12V voltage	-10	25	50	$\mathcal{L}$
Storage Temperature		-15	25	55	°C
Working Humidity	25℃	10%	60%	90%	RH
Protective Paint	Yes				
ESD	Air discharge $\pm$ 8KV, Contact discharge $\pm$ 6K				
CE	Class B				

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### Peripherals and Interfaces

Properties	Parameters	Description		
	2-way RS232	UART5 & UART9		
Interface	1-way RS485	UART8		
	1-way TTL/COMS	UART0		
USB Interface	3-way	HOST*2,OTG*1		
Headphone Interface	1-way	3.5mm spacing interface		
Speaker Interface	1-way	2Pin_1.25mm interface		
Microphone Interface	1-way	2Pin_1.25mm interface		
Camera Interface	1-way	USB		
SD Card Interface	1-way	Drawer type card slot(Max 64G)		
LAN Interface	1-way	10/100Mbps		
WIFI Module	1-way	IEEE 802.11Bb/g/n,2.4G,Bluetooth		
RTC	1-way	Button cell for power supply. Accuracy: ±20ppm @25°C		



### Disclaimer:

There are multiple parallel raw materials coexisting to guarantee the stable supply. If customers have particular raw material preferences or requirements, please contact the sales personnel.



## Interface

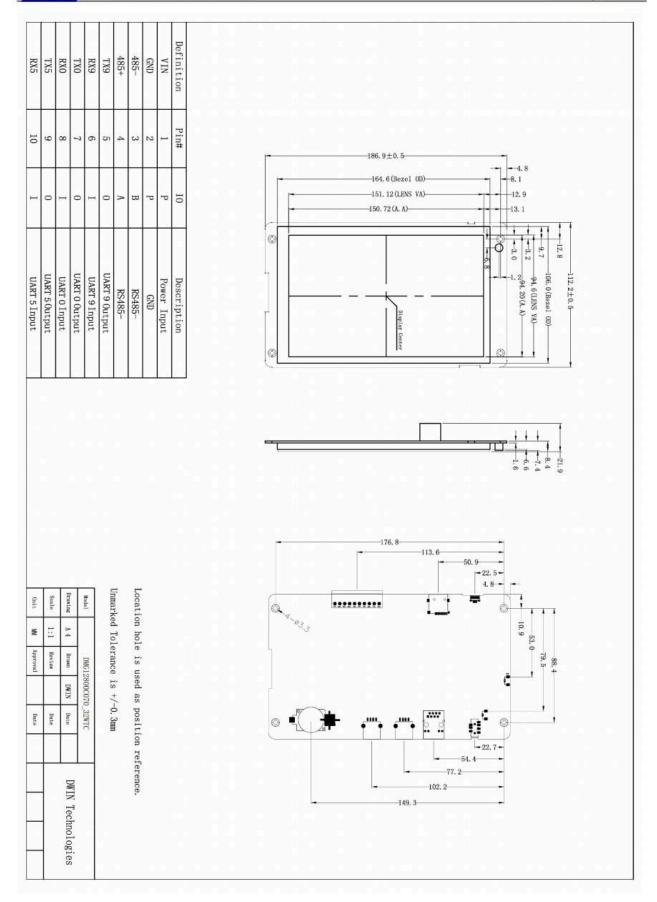
Properties	Conditions	Min	Тур	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage	Output 1	ā	-5.0	h <del></del> )	٧
(TXD)	Output 0		5.0		V
Input Voltage	Input 1	2	-5.0	5 <b>2</b> 5	V
(RXD)	Input 0	. 8	5.0		V
Baud Rate	User Set	2400	115200	921600	bps
() ( A.D.)	Output 1	2.5	5.0	121	V
(V_AB)	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	- 6	٧
	Input 0	*	-2.5	-0.2	٧
Interface	Support TTL/COMS,RS232 or F	RS485 level	5	-17/	
Socket	10Pin_3.81mm Socket		~0	6	

# Packing Capacity & Dimension

Dimension				
Dimension	112.2(W)*186.9(H)*21.9(T)mm	30		
Net Weight	305g	N/1		
Packing Capacit	у			
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)		19	9
Carton2:	250mm(L)*200mm(W)*80mm (H)	2	2 <b>1</b> ()	2
Carton3:	320mm(L)*270mm(W)*80mm (H)	2	2	4
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	20	20
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	34	34

Disclaimer: The product design is subject to alternation and improvement without prior notice.

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#### Record of Revision

Ver	Revise Date	Content	Editor
00	2023-01-09	First edition	YML
01	2023-08-07	Modify the WIFI module information	
02	2024-01-29	Update appearance, ESD and temperature range	YML

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

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Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

#### Important Disclaimer

DWIN reserves the right to make any changes to product designs without prior notice.

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