

DMG10768T121_34WTC



Features:

- Industrial Android intelligent display terminal based on RK3288, running Android 8.1 OS.
- 12.1-inch, 1024*768 pixels resolution, 16.7M colors, IPS-TFT-LCD, capacitive touch.
- Compatible with 4G, WIFI, Bluetooth, microphone, camera and other rich peripherals.
- Available for USB and SD card updates.
- Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.
- Available for downloading Android general apps to realize functions such as WiFi ,wired internet , browsing, music and video playback, data copy, etc.

● Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	RK3288, ARM Cortex-A17, Quad-core
OS	Android 8.1
FLASH	8Gbytes EMMC5.0
RAM	2Gbytes DDR3

● Display Parameters

Properties	Parameters	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide view angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best View angle: symmetrical
Active Area (A.A.)	245.76mm(W)*184.32mm(H)	1024*768 Pixel
Resolution	1024*768 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥30000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	350nit	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	Typ.	Max	Unit
Power Voltage	-	12.0	12.0	36.0	V
Operation Current	VCC = +12V, Backlight on	-	1220	-	mA
	VCC = +12V, Backlight off	-	300	-	mA

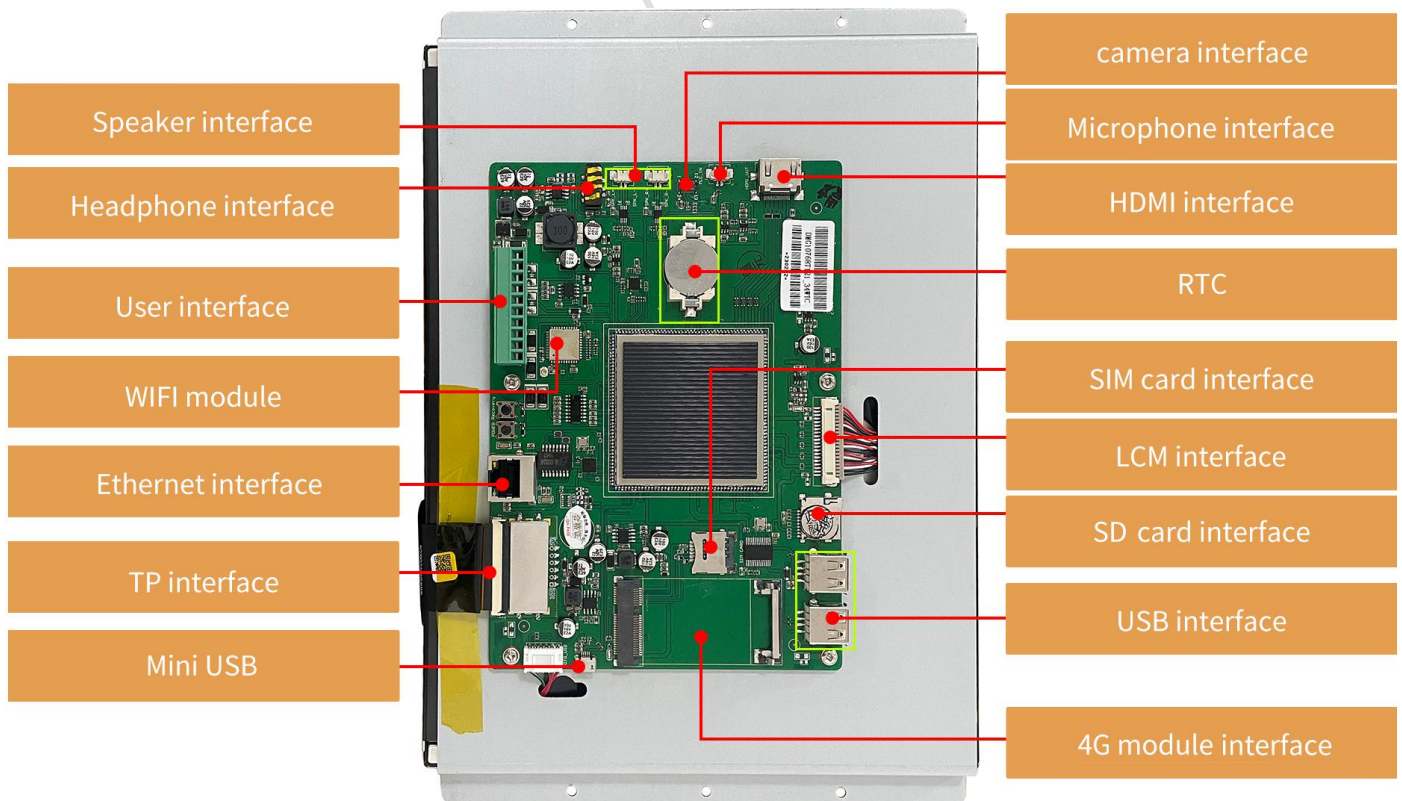
Recommended power supply: 12V 1A DC

● Reliability Test

Properties	Conditions	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	70	°C
Storage Temperature	-	-30	25	80	°C
Working Humidity	25°C	10%	60%	90%	RH
Conformal Coating	Yes				
ESD	Air discharge ±8KV; Contact discharge ±6KV				
EFT	Group pulse interference ±2KV				

● Peripherals and Interfaces

Properties	Parameters	Description
COM	2-way RS232	UART1 & UART4
	1-way RS485	UART3
	TTL/COMS	UART2(Debug interface)
USB Interface	3-way	HOST*2,OTG*1
Headphone Interface	1-way	3.5mm spacing interface
Speaker Interface	2-way	Left & right
Microphone Interface	1-way	-
Camera Interface	1-way	Mipi&USB
SD Card Slot	1-way	Drawer type card slot(Max 64G)
SIM Card Slot	1-way	Drawer type card slot
4G Module	1-way	Factory not configured, customizable to add
Ethernet	1-way	10/100Mbps
WIFI	1-way	IEEE 802.11Bb/g/n,2.4G,Bluetooth
RTC	Built-in	Button cell for power supply, Accuracy: $\pm 20\text{ppm}$ @25°C
HDMI Interface	1-way	HDMI interface



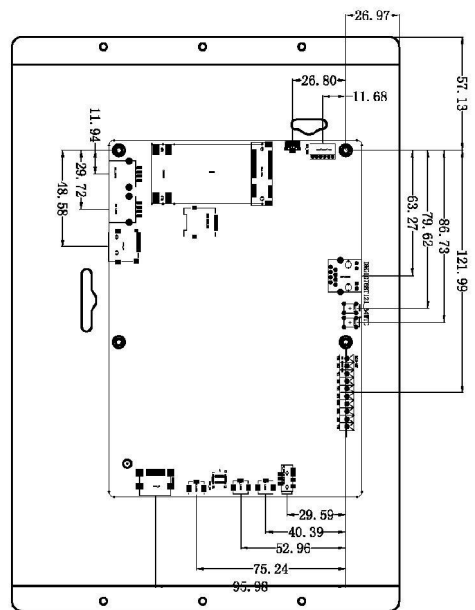
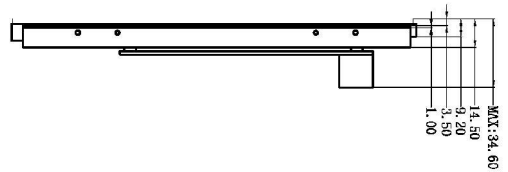
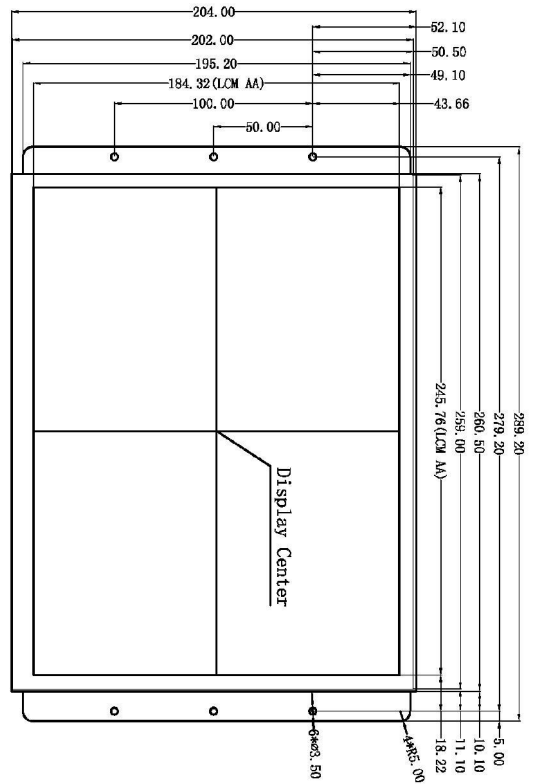
● Interface

Properties	Conditions	Min	Typ.	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage (TXD)	Output 1	-	-5.0	-3.0	V
	Output 0	3.0	5.0	-	V
Input Voltage (RXD)	Input 1	-15.0	-5.0	-	V
	Input 0	-	5.0	15.0	V
Baud Rate	User Set	2400	115200	921600	bps
(V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	Support TTL/COMS,RS232 or RS485 level				
Socket	10Pin_3.81mm Socket				

● Packing Capacity & Dimension

Dimension				
Dimension	289.2(W)*204.0(H)*34.6(T)mm			
Net Weight	1270g			
Packing Capacity				
Package Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm (H)	-	-	-
Carton3:	320mm(L)*270mm(W)*80mm (H)	2	1	2
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	10	10
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	16	16

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



Definition	Pin#	Type	Description
VIN	1	P	Power Input
GND	2	P	GND
485A	3	A+	485+
485B	4	B-	485-
RX2	5	I	UART2 DIN
TX2	6	O	UART2 DOUT
RX1	7	I	UART1 DIN
TX1	8	O	UART1 DOUT
RX4	9	I	UART4 DIN
TX4	10	O	UART4 DOUT

Location hole is used as position reference.
 Unmarked Tolerance is $\pm 0.3\text{mm}$
 Active area is marked in Dash lines

Model	DMG10768T121-34WTC		
Drawing	A 4	Drawn	G. Y
Scale	1 : 1	Review	
Unit	MM	Approval	
		Date	2022.08.17
DWIN Technologies			

● Revision Records

Rev	Revise Date	Content	Editor
00	2022-11-28	First Edition	Meilin Yuan
01	2022-12-05	Correct Package Information	Meilin Yuan
02	2022-12-09	Properties Optimize	Meilin Yuan
03	2023-5-15	Remove the 4G module and update the physical image	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:

Customer service Tel: +86-400-018-9008

Customer service E-mail: dwinhmi@dwin.com.cn

Website: www.dwin-global.com

DWIN Developer Forum: <https://forums.dwin-global.com/index.php/forums>

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