

DMG19108C156_32WTC



DWIN Technology Technical Document

● System Hardware

Properties	Parameters
Motherboard Level	Commercial-grade
CPU	RK3566, Quad-core ARM Cortex-A55, 1.8GHz Processor
OS	Android 11
Storage	8Gbytes EMMC
RAM	2Gbytes LPDDR4

● Display Parameters

Properties	Parameters	Description
Size	15.6 inch	-
Active Area (AA)	343.2mm (W)x192.6mm (H)	-
Viewing Area(VA)	342.2mm (W)x191.6mm (H)	-
Resolution	1920×1080	-
Backlight Service Life	>20000 Hrs	Backlight service life refers to the period the LED backlight operates under test conditions until brightness decreases to 50% of the initial level
Brightness	200nit	100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)

Note: Use dynamic screen saver to prevent afterimages from prolonged fixed page display.

● Touch Parameter

Properties	Parameters
Touch Type	Capacitive touch panel

● Power Supply

Properties	Min	Typ	Max	Unit
Power Voltage	9.0	12.0	23.0	V

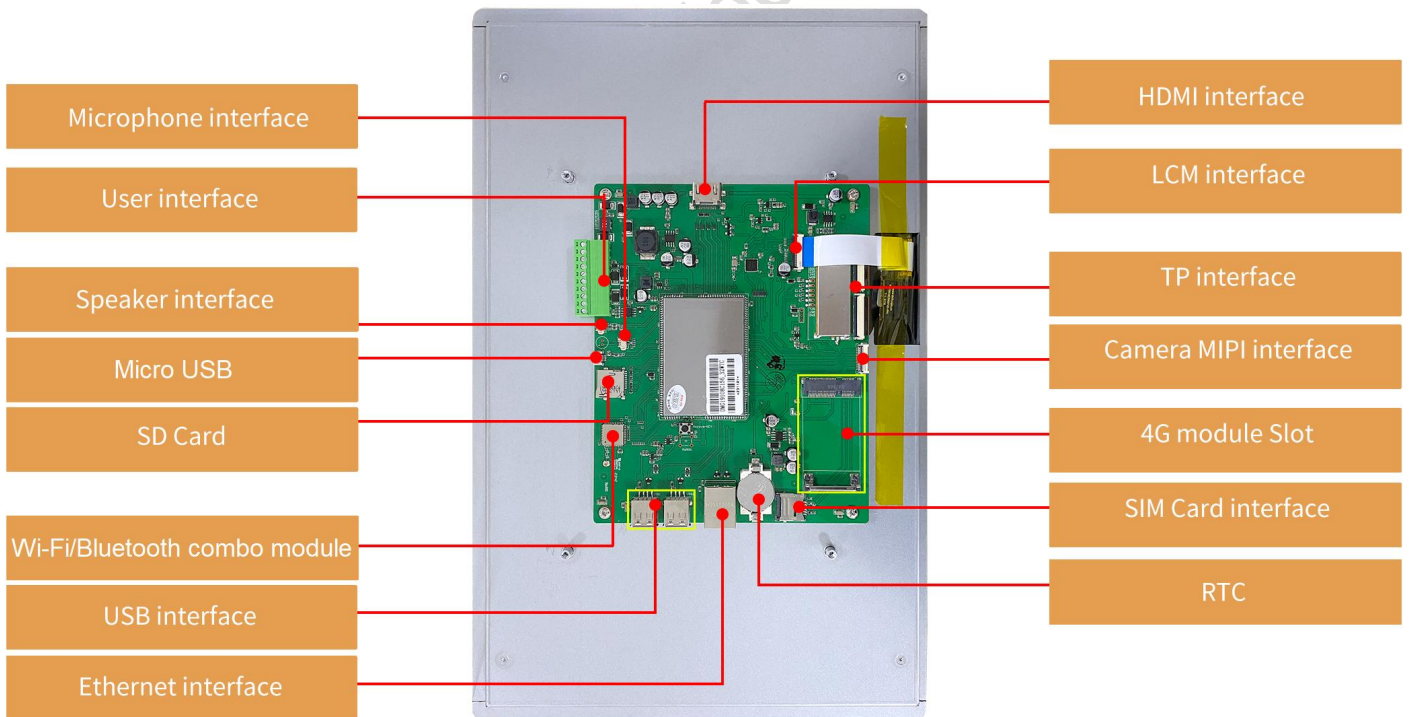
Recommended power supply: 12V 1A DC

● Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-10	25	60	℃
Storage Temperature	-	-20	25	70	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV; Contact: ±6KV				

● **Peripherals and Interfaces**

Properties	Description
User Interface	10Pin_3.81mm Horizontal socket
COM	RS232*2(COM5 & COM9), RS485*1, TTL*1(COM0)
Ethernet	10/100Mbps
USB	USB 2.0*2(HOST),Micro USB*1(OTG)
SD Card	Max 64G
RTC	Accuracy: $\pm 20\text{ppm @}25^{\circ}\text{C}$
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
Camera	USB*1/MIPI*1(front or rear optional)
Wi-Fi	IEEE 802.11Bb/g/n, 2.4GHz, Bluetooth
Bluetooth	4.2GHz
4G module	Factory not configured, customizable to add
HDMI	23PIN_HDMI_SH



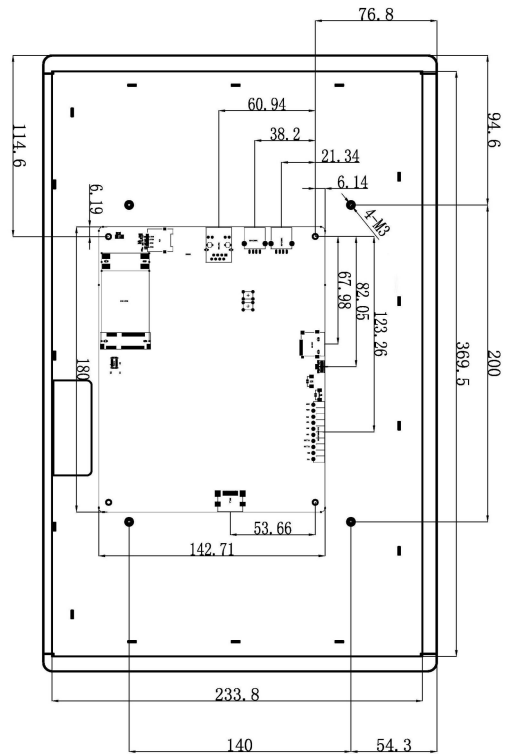
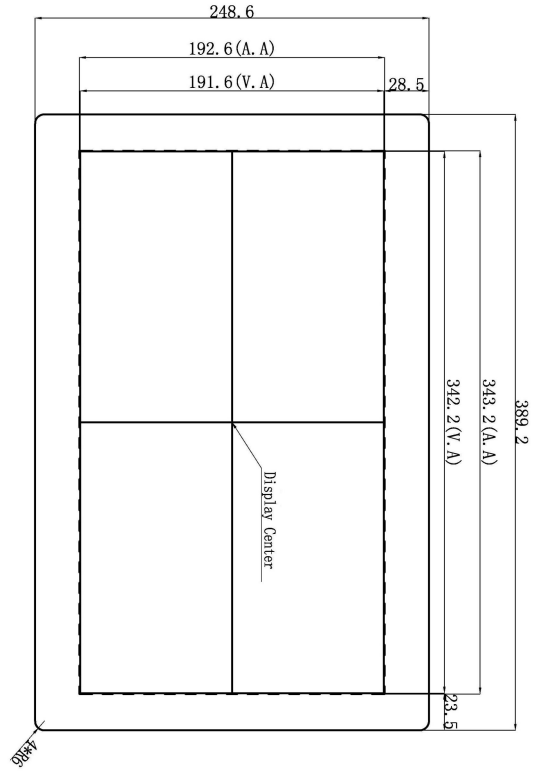
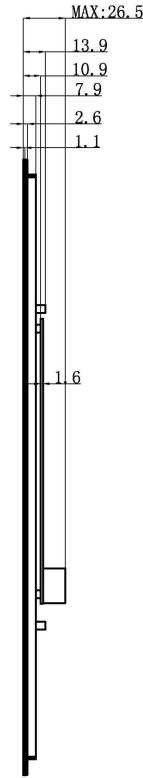
- **Development Platform**

Development	
Android	Java, Kotlin, C++

- **Packing Capacity & Dimension**

Dimension				
Dimension	389.2(W)*248.6(H)*26.5(T)mm			
Net Weight	-			
Packing Capacity				
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)	-	-	-
Carton4:	525mm(L)*330mm(W)*80mm(H)	1	1	1
Carton5:	450mm(L)*350mm(W)*300mm(H)	-	-	-
Carton6:	570mm(L)*340mm(W)*385mm(H)	1	5	5

Definition	Pin#	I/O	Description
VIN	1	P	Power input
GND	2	P	GND
TX0	3	0	UART 0 DOUT
RX0	4	I	UART 0 DIN
TX9	5	0	UART 9 DOUT
RX9	6	I	UART 9 DIN
TX5	7	0	UART 5 DOUT
RX5	8	I	UART 5 DIN
485A	9	A	RS485+
485B	10	B	RS485-



1. Location hole is used as position reference.
2. Unmarked Tolerance is +/-0.3mm
3. Active area is marked in Dash lines

Model	DMG19108C156_32WTC			
Drawing	A 4	Drawn	G. Y	Date
Scale	1:1	Review		2023.06.19
Unit	MM	Approval		Date

Revision Records

Rev.	Revise Date	Content	Editor
00	2023-06-20	First edition	YML
01	2023-08-07	Modify the WIFI module information	YML
02	2023-12-07	Camera MIPI interface was available	YML
03	2024-12-31	Modify the voltage value range, add development	Chen
04	2025-03-12	Add the description of Bluetooth	Chen

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