

DMT10600T070_35WTR



Features:

- Industrial Linux intelligent display terminal based on Allwinner A40i, running Linux3.10 operating system.
- 7.0-inch, 1024*600 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, resistive touch, with shell.
- Adopt QT environment for secondary development.
- Available for multi-language, vector font library, picture library, video library and audio library.
- Connect to a PC with a network cable to download and update projects.
- Available for RS232, RS422 and Ethernet port to connect and communicate with external devices.

Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	Allwinner A40i Quad-core ARM Cortex™-A7
OS	Linux3.10
FLASH	8Gbytes EMMC
RAM	1Gbytes DDR3

Display Parameters

Properties	Parameters	Description
Color	16.7M (16777216) colors	24-bit color 8R8G8B
Panel Type	IPS	IPS LCD with wide view angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best view angle: symmetrical
Active Area (A.A.)	154.20mm(W)*85.88mm(H)	-
View Area (V.A.)	155.0mm(W)*87.5mm(H)	-
Resolution	1024*600	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	200nit	100 levels adjustment (It's not recommended 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

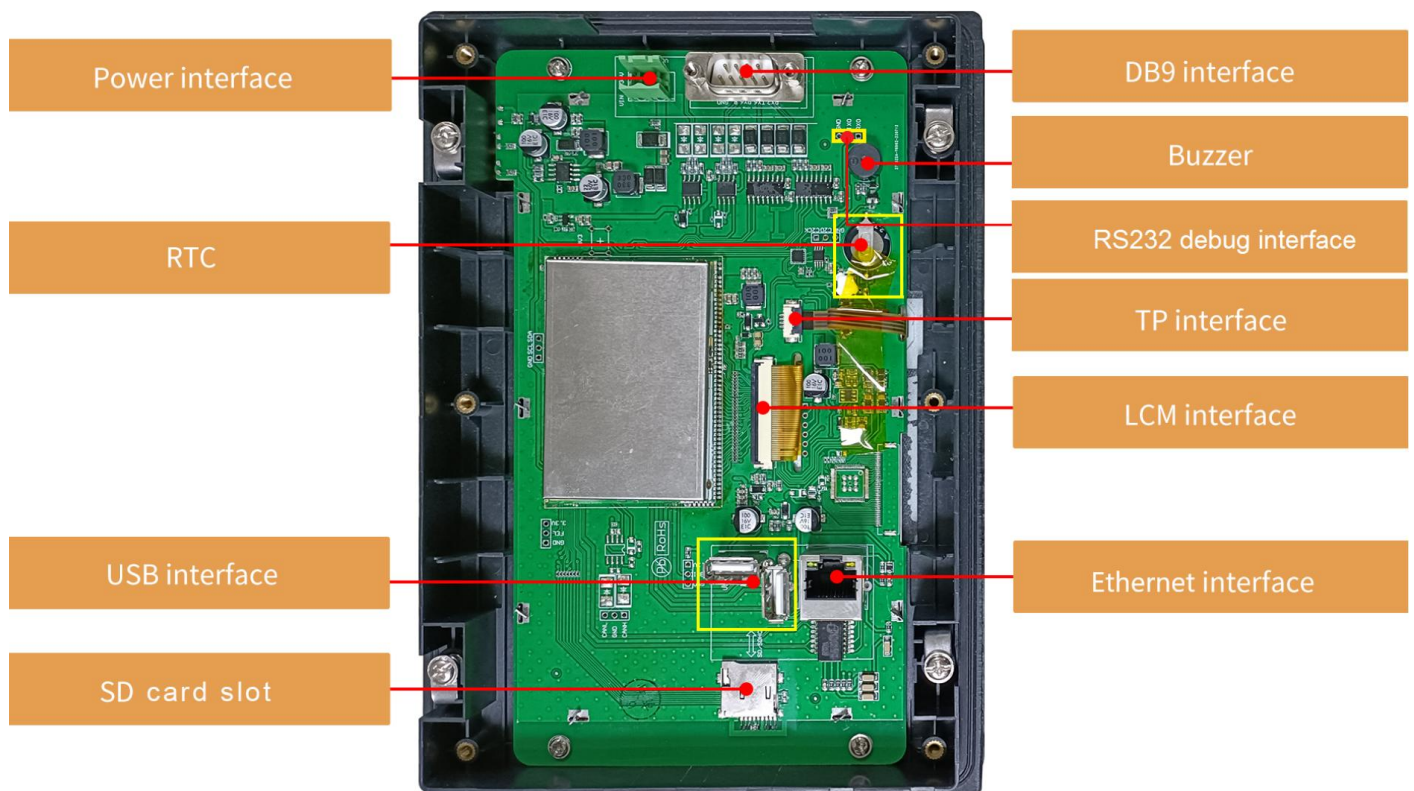
Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	9.0	12.0	23.0	V
Operation Current	VCC = +12V, 100% brightness	-	270	-	mA
	VCC = +12V, backlight off	-	110	-	mA
Recommended power supply: 12V 0.5A DC					

Reliability Test

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

Peripheral and Interfaces

Properties	Parameters	Description
COM	2-way RS232	UART2 & UART6
	1-way RS422	UART3
USB Interface	2-way	HOST*2
SD Card Slot	1-way	Drawer type card slot(Max 64G)
Ethernet Interface	1-way	10/100Mbps
RTC	Built-in	Super-capacitor RTC. Accuracy: $\pm 20\text{ppm}$ @25°C
Buzzer	Built-in	3V passive buzzer

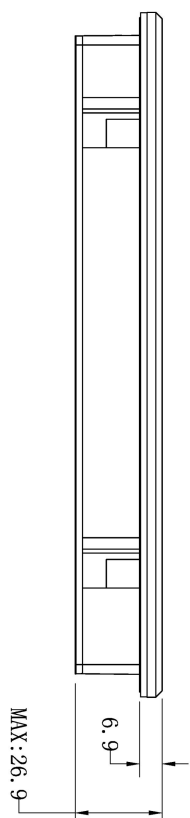
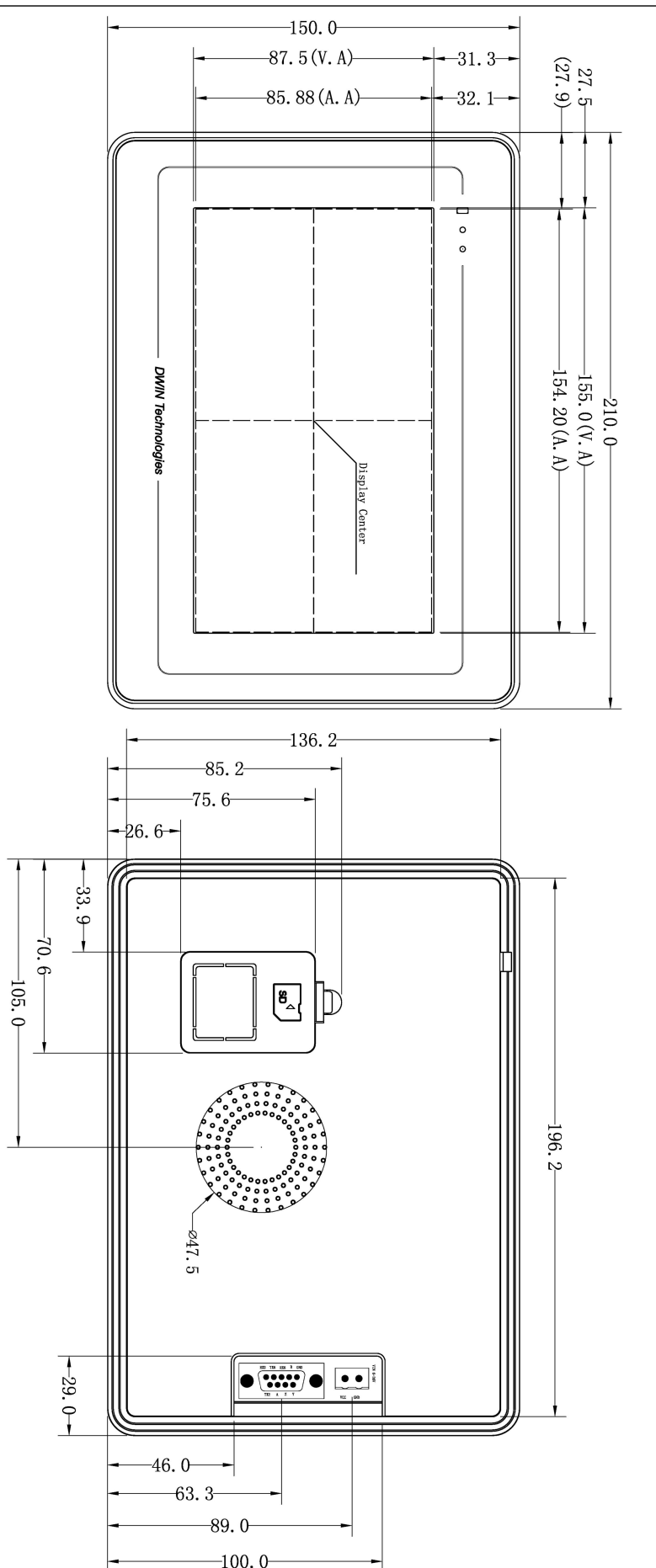


● Interface Parameters

Properties	Conditions	Min	Typ.	Max	Unit
Baud Rate	User-defined	3150	115200	3225600	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-defined	3150	115200	921600	bps
Output Voltage (V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5	-2.5	V
Input Voltage (V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	RS232*2 RS422*1				
Socket	2Pin-5.08mm socket, DB9 interface				

● Packing Capacity & Dimension

Dimension				
Dimension	210.0(W)*150.0(H)*26.9(T)mm			
Net Weight	540g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity (Pcs)
Carton1:	220mm(L)*160mm(W)*47mm(H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm(H)	2	1	2
Carton3:	320mm(L)*270mm(W)*80mm(H)	-	-	-
Carton4:	450mm(L)*350mm(W)*300mm(H)	1	16	16
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	30	30



Definition	Pin#	Type	Description
RX2	1	I	UART2 DIN
TX6	2	O	UART6 DOUT
RX6	3	I	UART6 DIN
B	4	-	RS422
GND	5	P	GND
TX2	6	O	UART2 DOUT
A	7	-	RS422
Z	8	-	RS422
Y	9	-	RS422

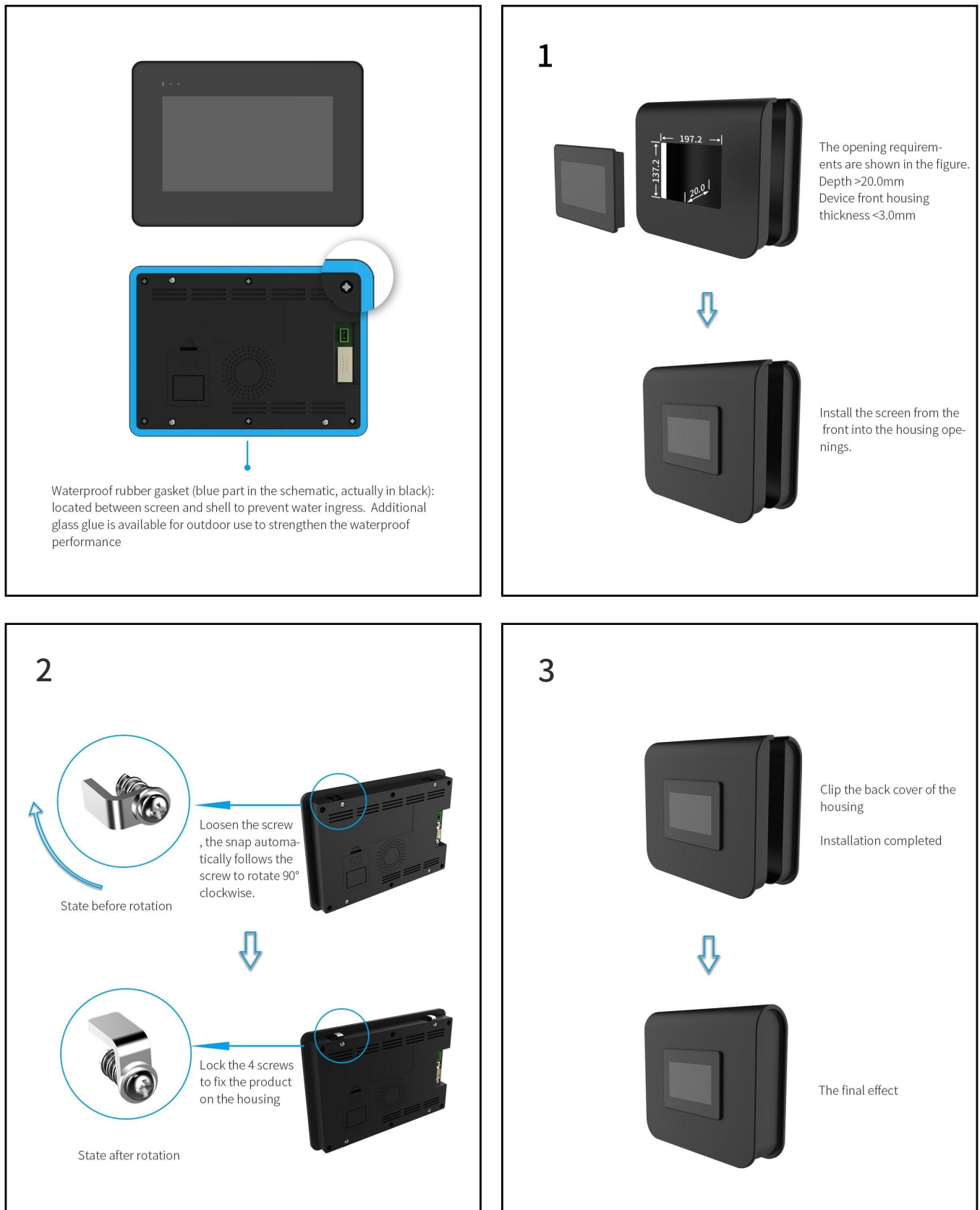
Definition	Pin#	Type	Description
VCC	1	P	Power Input
GND	2	P	GND

Model	DMT106007070_35WTR			Beijing DWIN Technology Co., Ltd			
Drawing	A 4	Drawn	DW\N	Date			
Scale	1 : 1	Review		Date			
Unit	MM	Approval		Date			

1. Location hole is used as position reference.
2. Unmarked Tolerance is $\pm 0.3\text{mm}$

Active area is marked in Dash lines

Installation Schematic



Revision Records

Rev	Revise Date	Content	Editor
00	2022-10-24	First Edition	Lvzhi Chen
01	2022-12-12	Package, Interface Picture and Format Update	YML

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