

DMT10600T070_38WTC



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, capacitive touch, with shell.
- Adopt DWIN HMI configuration software for secondary development.
- Integrated PLC communication, alarm, sampling, formula and other database management, interface customization, macro command and other functions.
- 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 CortexTM-A7 Processor
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	250nit	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

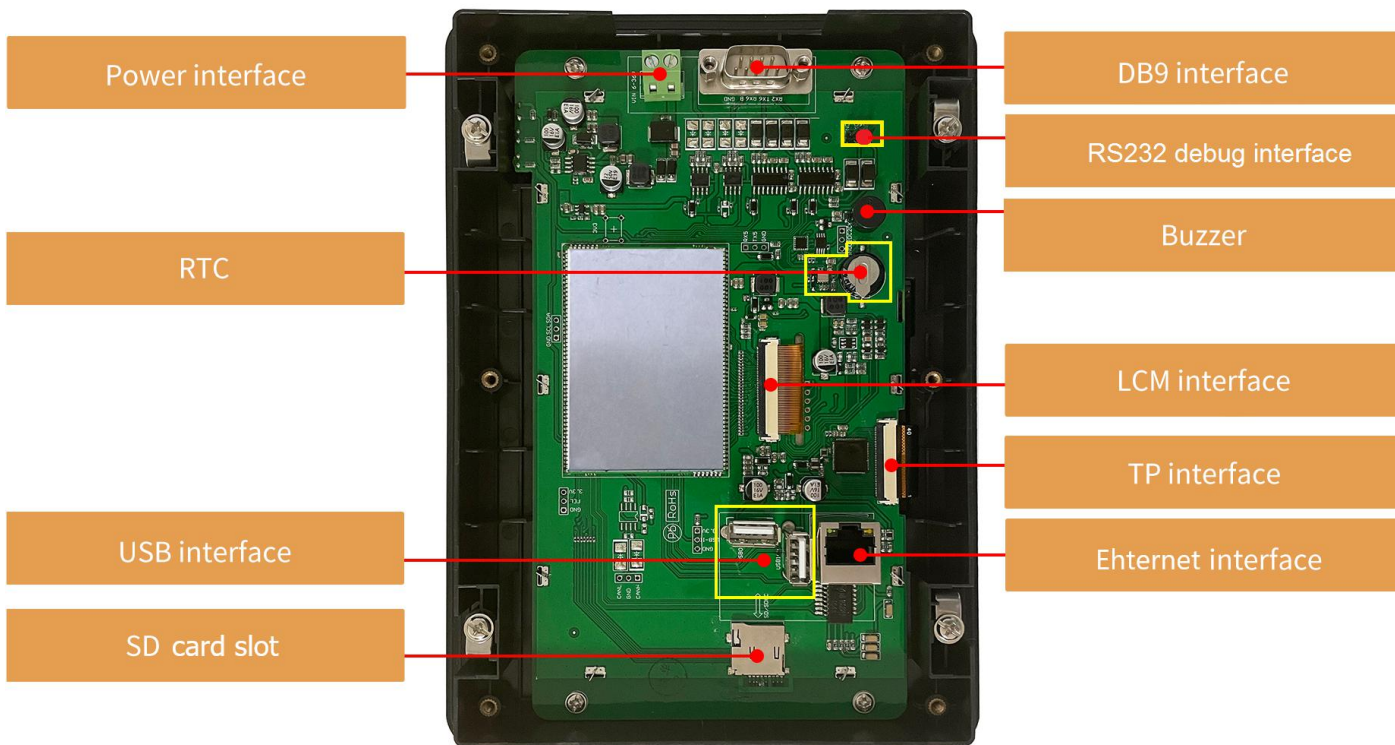
Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	9.0	12.0	36.0	V
Operation Current	VCC = +12V, 100% brightness	-	280	-	mA
	VCC = +12V, backlight off	-	110	-	mA
Recommended power supply: 12V 0.5A DC					

● 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: $\pm 20\text{ppm @}25^{\circ}\text{C}$
Buzzer	Built-in	3V passive buzzer



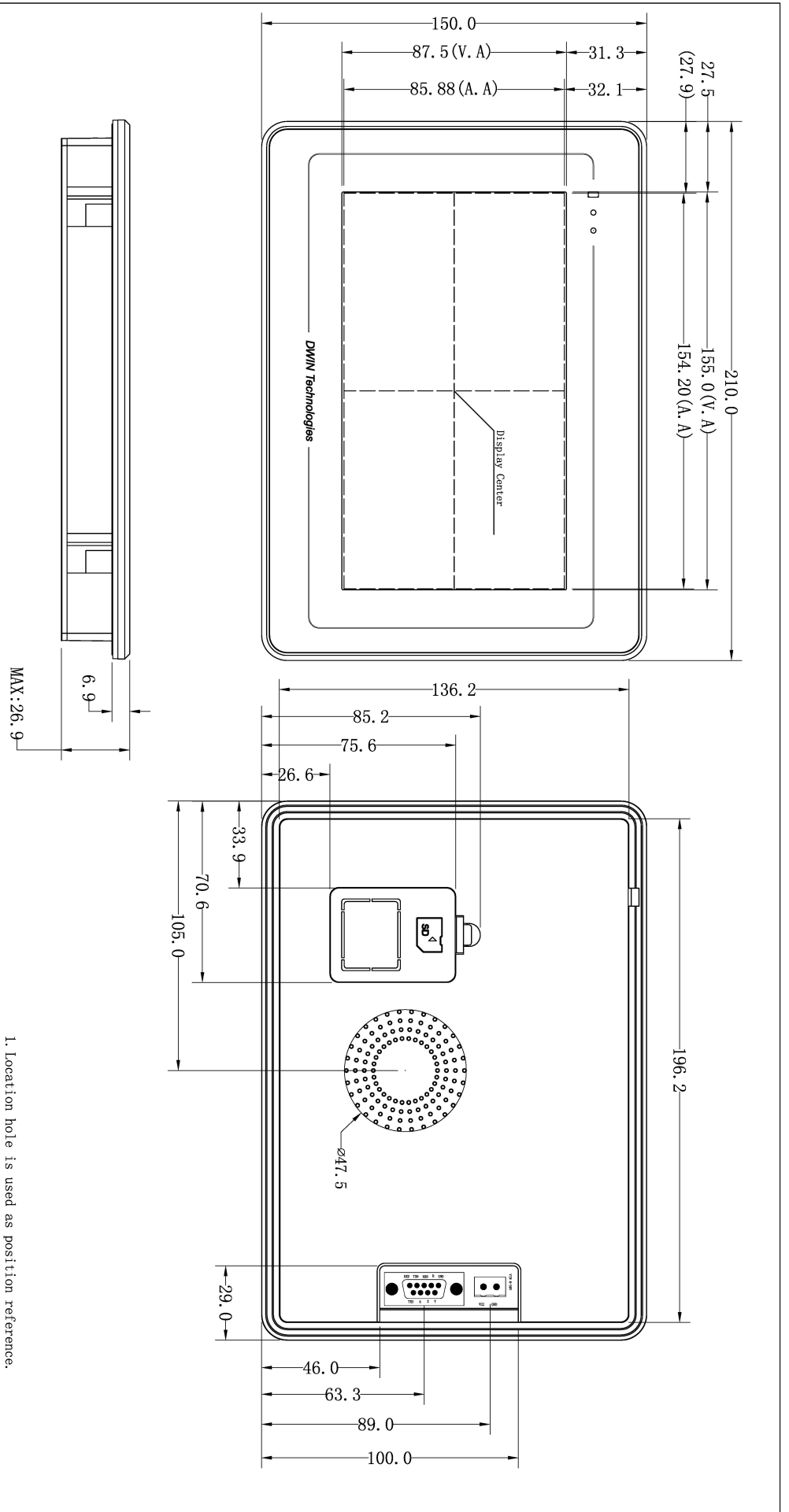
● Interface Parameters

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
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	570g			
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

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



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

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		DMT10600T070_38WTC		
Drawing	A 4	Drawn	DWTN	Date
Scale	1:1	Review		Date
Unit	MM	Approval		Date

Beijing DWIN Technology Co., Ltd

Installation Schematic

Waterproof rubber gasket (blue part in the schematic, actually in black): located between screen and shell to prevent water ingress. Additional glass glue is available for outdoor use to strengthen the waterproof performance

1

The opening requirements are shown in the figure.
Depth >20.0mm
Device front housing thickness <3.0mm

Install the screen from the front into the housing openings.

2

Loosen the screw, the snap automatically follows the screw to rotate 90° clockwise.

Lock the 4 screws to fix the product on the housing

State before rotation

State after rotation

3

Clip the back cover of the housing

Installation completed

The final effect

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
02	2024-4-15	Add Important Disclaimer	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!

Important Disclaimer

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

Customers should ensure strictly adhering to all the relevant standards and requirements during the product application process, including but not limited to functional safety, information security, and regulatory provisions.

DWIN shall not bear any joint and several liability for any consequences that may arise from customers' adoption of DWIN products. In particular, for risks that may lead to significant property losses, environmental hazards, personal injury, or even death, especially in high-risk application areas such as military applications, flammable and explosive places, and life-saving medical equipment, customers should independently assess the risks and take corresponding preventive and protective measures. DWIN shall not bear any relevant responsibility.