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DMT80480T050_36WTR

Features:

- **Industrial Linux intelligent display terminal based on T113, running Linux5.4 operating system.**

- **5.0-inch, 800*480 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.**

- **Compatible with network cable connection with PC to download update project.**

- **Available for RS232, RS485, CAN and Ethernet port to connect and communicate with external devices.**

- **Anti-UV and anti-glare**

● **Master Control Parameters**

Properties	Parameters
Motherboard Level	Industrial
CPU	Dual-core ARM CortexTM-A7 Processor
OS	Linux 5.4
FLASH	8GBytes EMMC
RAM	128MBytes DDR3

● **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.)	108.8mm(W)*65.6mm(H)	-
Resolution	800*480	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 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**

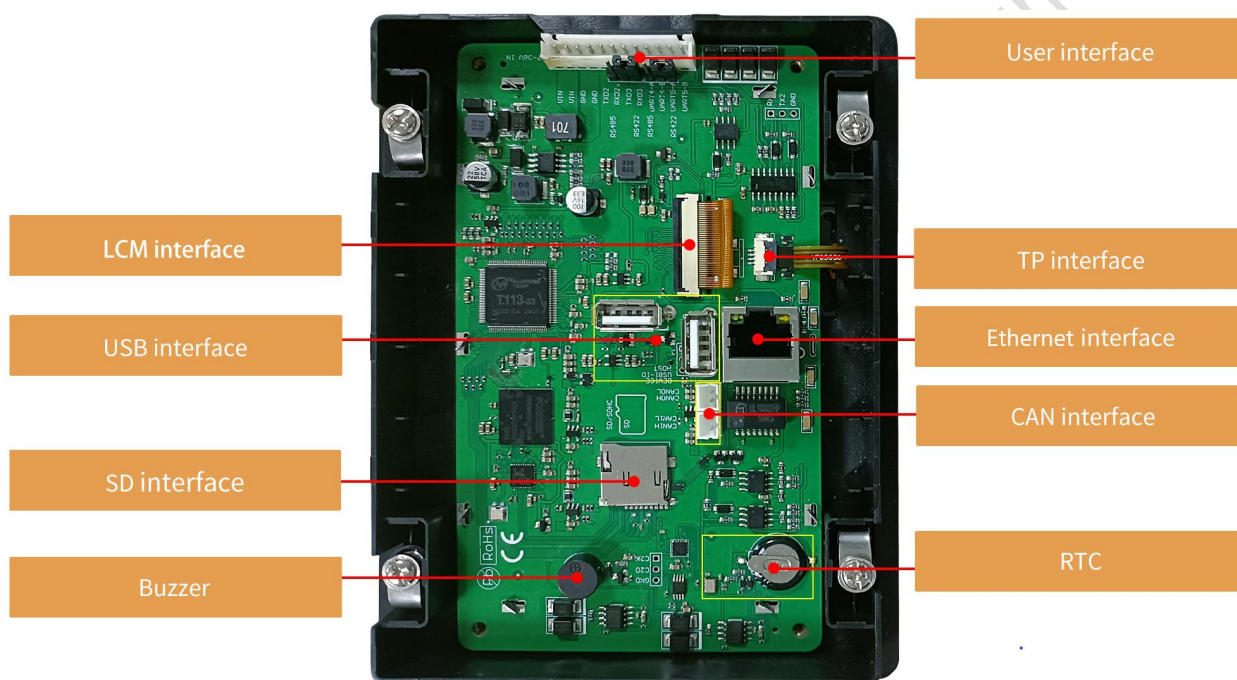| Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	7.0	12.0	23	V
Operation Current	VCC = +12V, Backlight on	-	270	-	mA
	VCC = +12V, Backlight off	-	120	-	mA

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				

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● **Peripheral and Interfaces**

Properties	Parameters	Description
Interface	2-way RS232	UART2 & UART3
	2-way RS485	UART4 & UART5
CAN Interface	2-way	2Pin_2.0mminterface (CAN0, CAN1)
USB Interface	2-way	HOST*2
SD Card Interface	1-way	Drawer type card slot(Max 64G)
Ethernet Interface	1-way	10/100Mbps
RTC	Built-in	Super-capacitor RTC. Accuracy: ±20ppm @25℃
Buzzer	Built-in	3V passive buzzer

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.
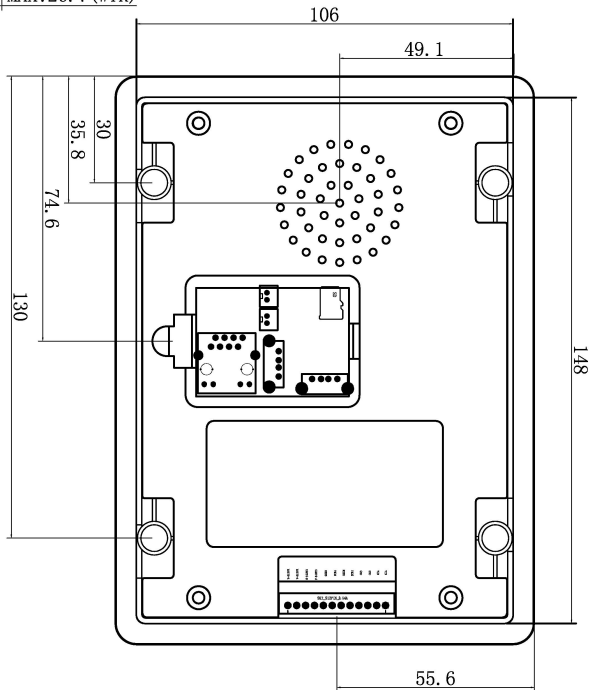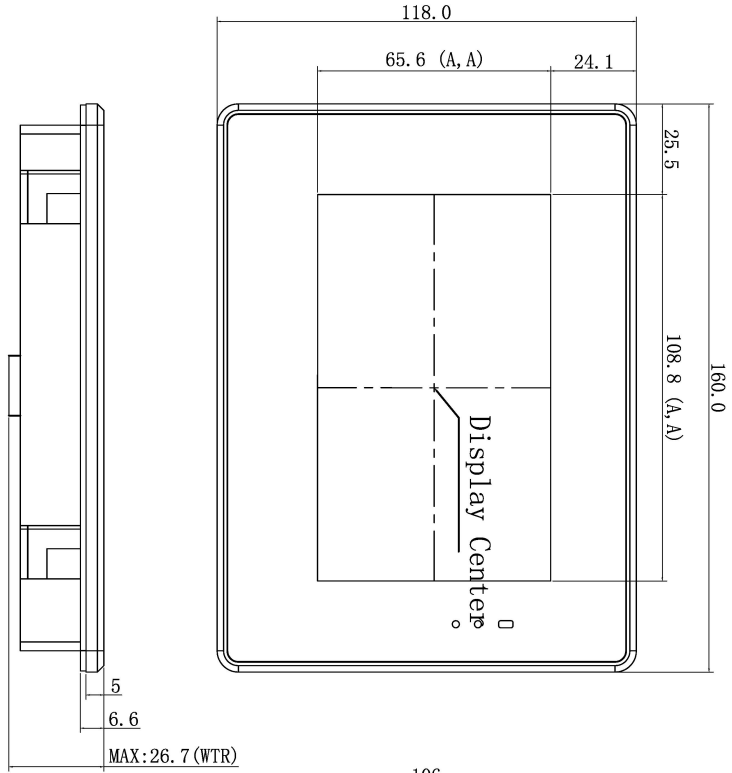
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● **Interface Parameters**

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 RS485*2				
Socket	12Pin_2.54mm				

● **Packing Capacity & Dimension**

Dimension				
Dimension	160.0 (W) *118.0(H)*26.7(T)mm			
Net Weight	320g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220(L)*160(W)*47(H)mm	1	1	1
Carton2:	250(L)*200(W)*80(H)mm	1	2	2
Carton3:	320(L)*270(W)*80(H)mm	2	2	4
Carton4:	450(L)*350(W)*300(H)mm	1	20	20
Carton5:	600(L)*450(W)*300(H)mm	1	34	34

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

Definition	Pin#	Type	Description
VIN	1, 2	P	Power Input
GND	3, 4	P	GND
TXD2	5	O	UART 2 DOUT
RXD2	6	I	UART 2 DIN
TXD3	7	O	UART 3 DOUT
RXD3	8	I	UART 3 DIN
UART4-A	9	A	RS485A
UART4-B	10	B	RS485B
UART5-A	11	A	RS485A
UART5-B	12	B	RS485B

118.0

65.6 (A, A)   24.1

25.5

108.8 (A, A)

160.0

Display Center

5

6.6

MAX:26.7(WTR)

106

49.1

30

35.8

74.6

130

148

55.6

1. Location hole is used as position reference

2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model		DMT80480T050-36WTR			
Drawing	A 4	Drawn	DWIN	Date	
Scale		Review	Date	Date	
Unit	MM	Approval	Date		

DWIN Technology

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

276.9
178.9
21.5

The opening requirem-ents are shown in the figure.
Depth >21.5mm
Device front housing thickness <3.0mm

Install the screen from the front into the housing ope-nings.

2

Loosen the screw , the snap automa-tically follows the screw to rotate 90° clockwise.

State before rotation

Lock the 6 screws to fix the product on the housing

State after rotation

3

Clip the back cover of the housing

Installation completed

The final effect

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Revision records

Rev	Revise Date	Content	Editor
00	2023-08-07	First Edition	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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