

# DMT80480T050\_39WTR



## Features:

- Industrial Linux intelligent display terminal based on T113, running Linux 5.4 operating system.
- 5.0-inch, 800\*480 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, resistive 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.
- 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.

## Master Control Parameters

Properties	Parameters
Motherboard Level	Industrial
CPU	Dual-core ARM Cortex™-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

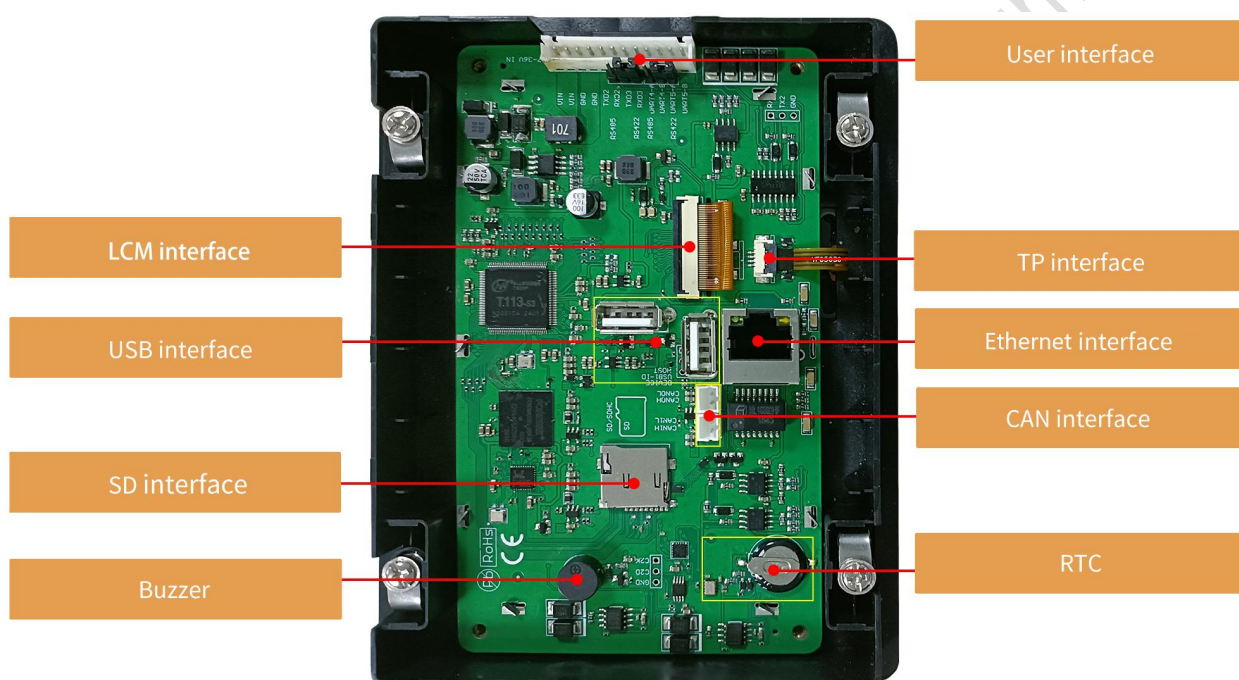
Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	7.0	12.0	36.0	V
Operation Current	VCC = +12V, Backlight on	-	270	-	mA
	VCC = +12V, Backlight off	-	120	-	mA
Recommended power supply: 12V 0.5A DC					

## 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				

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



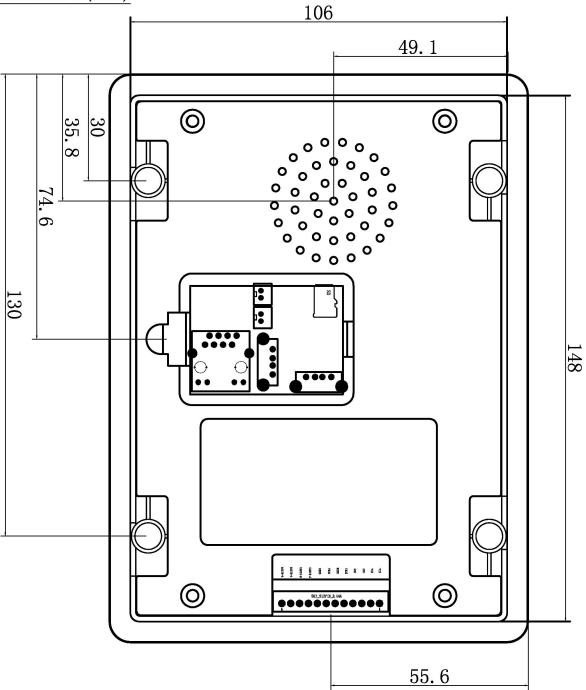
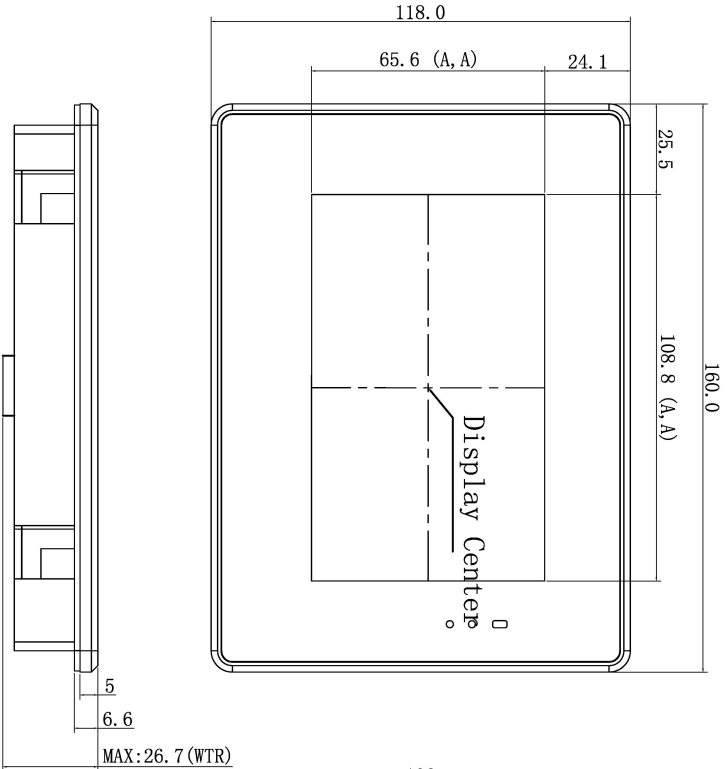
## ● Interface Parameters

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
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.



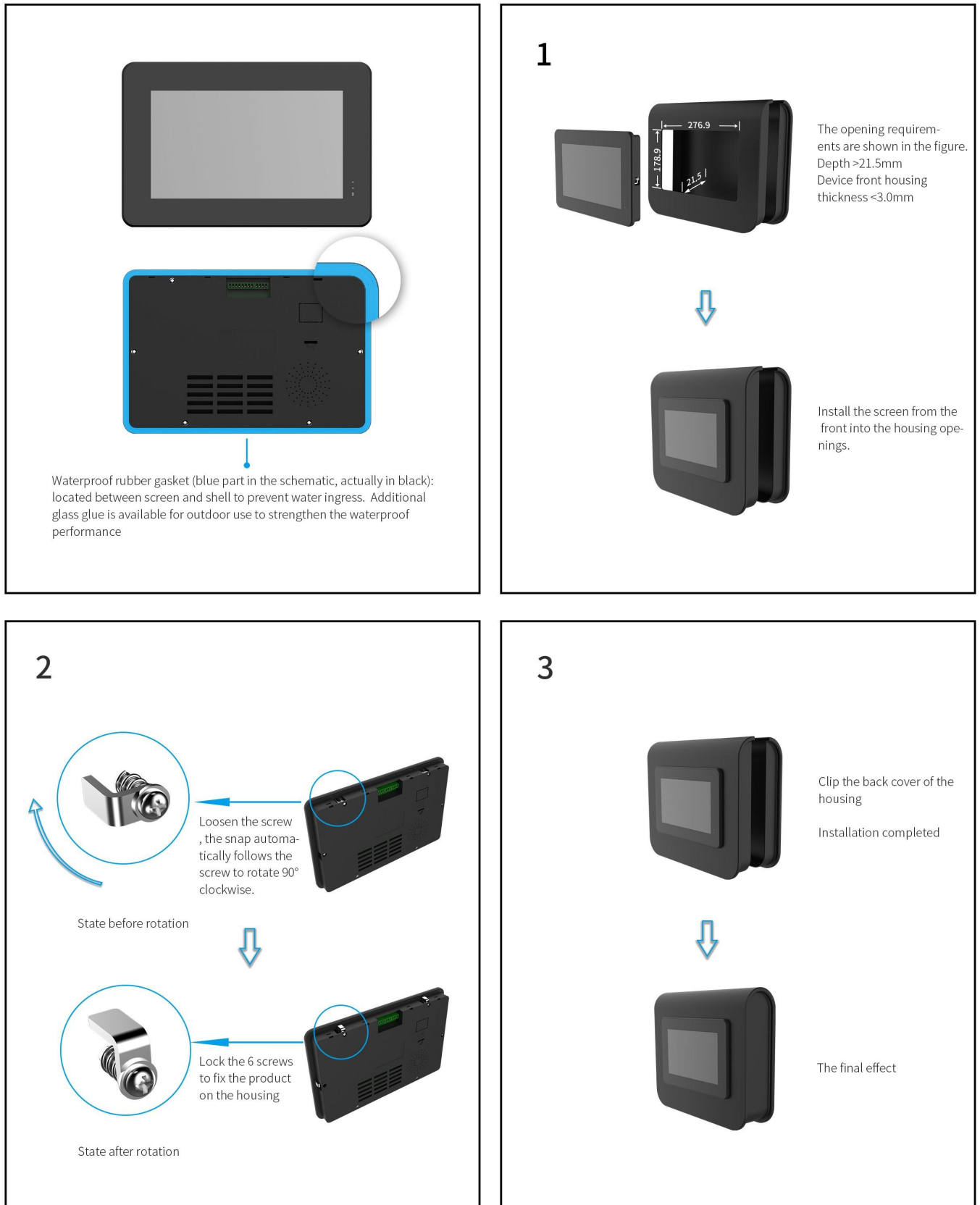
Definition	Pin#	Type	Description
VIN	1, 2	P	Power Input
GND	3, 4	P	GND
TXD2	5	0	UART 2 DOUT
RXD2	6	I	UART 2 DIN
TXD3	7	0	UART 3 DOUT
RXD3	8	I	UART 3 DIN
UART4-A	9	A	RS485A
UART4-B	10	B	RS485B
UART5-A	11	A	RS485A
UART5-B	12	B	RS485B

1. Location hole is used as position reference
2. Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMT80480T050-39WTR				DWIN Technology			
Drawing	A 4	Drawn	DWIN	Date				
Scale		Review		Date				
Unit	MM	Approval		Date				

# Installation Schematic



**Revision records**

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

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