

# DMT10600T101\_36WTC



## Features:

- Industrial Linux intelligent display terminal based on Allwinner T113-S3, running Linux5.4 operating system.
- 10.1-inch, 1024\*600 pixels resolution, 16.7M colors, IPS-TFT-LCD, wide viewing angle, capacitive 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, RS485, RS422 and Ethernet port to connect and communicate with external devices.

## ● Master Control Parameters

| Properties        | Parameters   |
|-------------------|--|
| Motherboard Level | Industrial   |
| CPU               | Allwinner T113-S3<br>Dual-core ARM CortexTM-A7 Processor |
| OS                | Linux5.4   |
| FLASH             | 8GBytes EMMC   |
| RAM               | 128MBytes DDR3   |

## ● Display Parameters

| Properties   | Parameters              | Description   |
|--|-------------------------|---|
| Color  | 16.7M (16777216) colors | 24-bit color 8R8G8B   |
| Panel Type   | IPS                     | IPS LCD with wide view angle  |
| Viewing Angle  | 85/85/85/85 (L/R/U/D)   | Best view angle: symmetrical  |
| Active Area (A.A.)   | 222.7mm(W)*125.3mm(H)   | -   |
| View Area (V.A.)   | 222.7mm(W)*125.3mm(H)   | -   |
| Resolution   | 1024*600                | Available for 0/90/180/270rotated 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: Please add animation to avoid residual images resulted by displaying of high-contrast still images for more than 30 minutes. |                         |   |

## ● Voltage & Current

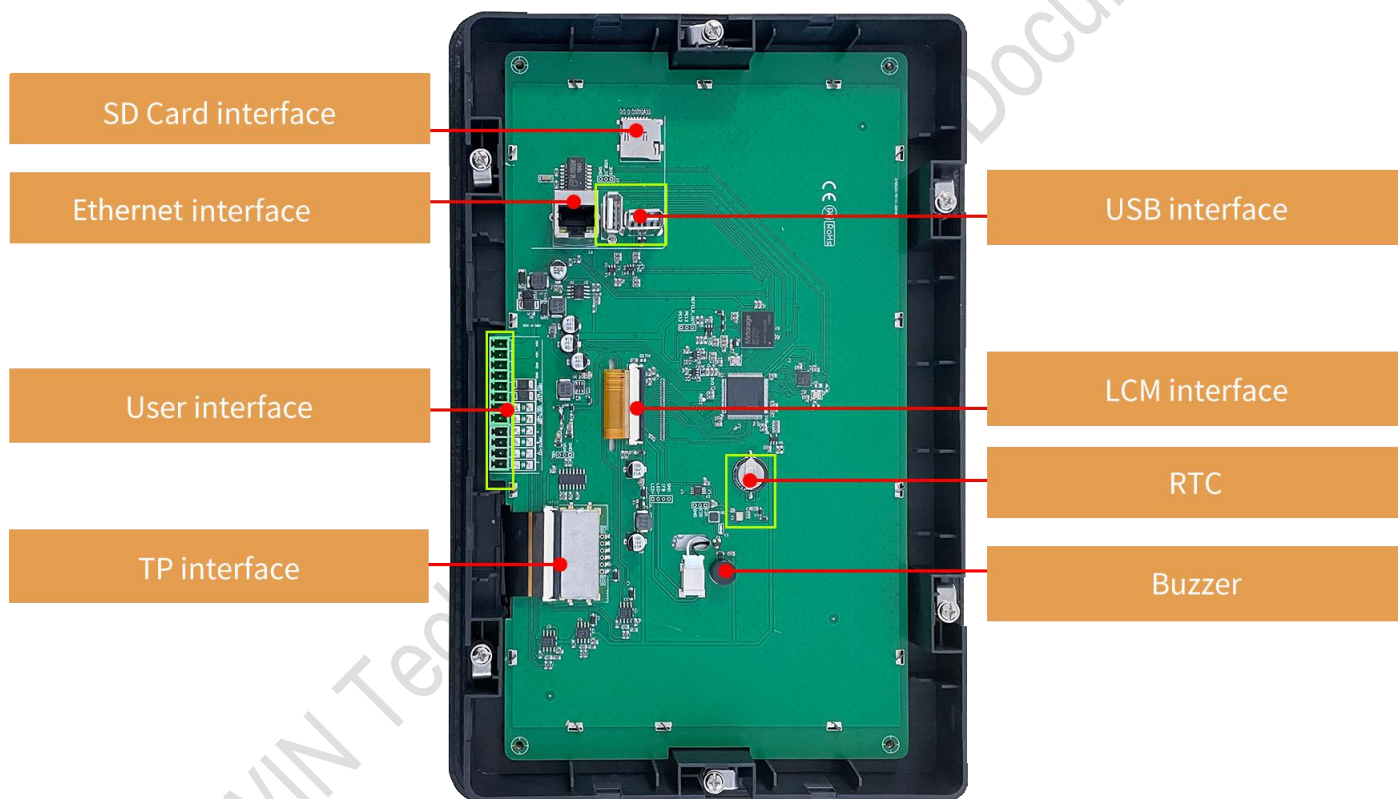
| Properties                          | Conditions                  | Min | Typ. | Max  | Unit |
|-------------------------------------|-----------------------------|-----|------|------|------|
| Power Voltage                       | -                           | 6.0 | 12.0 | 23.0 | V    |
| Operation Current                   | VCC = +12V, 100% brightness | -   | 370  | -    | mA   |
|                                     | VCC = +12V, Backlight off   | -   | 130  | -    | mA   |
| Recommended power supply: 12V 1A 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 |     |      |     |      |
| Protective Level    | IP65 (Front)                 |     |      |     |      |

● Peripheral and Interfaces

| Properties    | Parameters  | Description                              |
|---------------|-------------|--|
| Interface     | 1-way RS232 | UART2                                    |
|               | 1-way RS485 | UART5                                    |
|               | 1-way RS422 | UART3                                    |
| USB Interface | 2-way       | HOST*2                                   |
| SD Card       | 1-way       | Drawer type card slot Max 64G            |
| LAN           | 1-way       | 10/100Mbps                               |
| RTC           | Built-in    | Super-capacitor RTC. Accuracy: 20ppm @25 |
| 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                               | -     | -0.5   | -2.5    | V    |
| Input Voltage V_AB  | Input 1                                | 0     | 2.5    | -       | V    |
|                     | Input 0                                | -     | -2.5   | -0.2    | V    |
| Interface           | RS232*1, RS485*1, RS422*1              |       |        |         |      |
| Socket              | 8Pin_3.81mm Socket, 4Pin_3.81mm Socket |       |        |         |      |

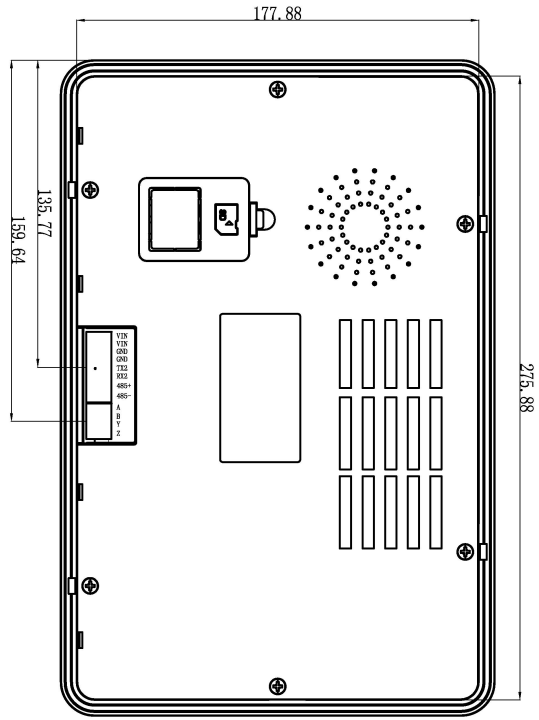
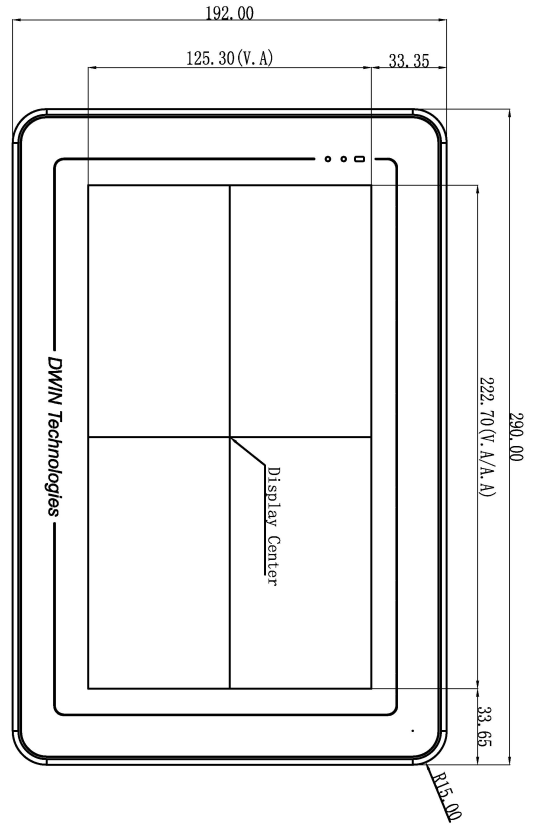
**● Packing Capacity & Dimension**

| Dimension        |                             |       |                |                |
|------------------|-----------------------------|-------|----------------|----------------|
| Dimension        | 290.0(W)*192.0(H)*29.5(T)mm |       |                |                |
| Net Weight       | 950g                        |       |                |                |
| 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:         | 450mm(L)*350mm(W)*300mm(H)  | -     | -              | -              |
| Carton5:         | 600mm(L)*450mm(W)*300mm(H)  | 1     | 8              | 8              |

**Disclaimer:**

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

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.



| Definition | Pin# | I/O | Description |
|------------|------|-----|-------------|
| VIN        | 1. 2 | P   | Power Input |
| GND        | 3. 4 | P   | GND         |
| TX2        | 5    | 0   | DOUT        |
| RX2        | 6    | I   | DIN         |
| 485+       | 7    | A+  | 485+        |
| 485-       | 8    | B-  | 485-        |
| A          | 9    | -   | RS422       |
| B          | 10   | -   | RS422       |
| Y          | 11   | -   | RS422       |
| Z          | 12   | -   | RS422       |

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

|                   |                    |          |      |
|-------------------|--------------------|----------|------|
| Model             | DMT10600T101-36WTC |          |      |
| Drawing           | A 4                | Drawn    | DWIN |
| Scale             | 1 : 1              | Review   |      |
| Unit              | MM                 | Approval |      |
|                   |                    | Date     |      |
| DWIN Technologies |                    |          |      |

# 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 >21.5mm  
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.

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

**Revision records**

| <b>Rev</b> | <b>Revise Date</b> | <b>Content</b>                               | <b>Editor</b> |
|------------|--------------------|--|---------------|
| 00         | 2022-10-24         | First Edition                                | Lvzhi Chen    |
| 01         | 2022-12-12         | Package, Interface Picture and Format Update | YML           |
| 01         | 2024-07-02         | Update image                                 | 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!

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