

DMT10600T101_38WTC



Features:

- Industrial Linux intelligent display terminal based on Allwinner A40i, running Linux3.10 operating system.
- 10.1-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, RS485 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.) | 222.7mm(W)*125.3mm(H) | - |
| View Area (V.A.) | 222.7mm(W)*125.3mm(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

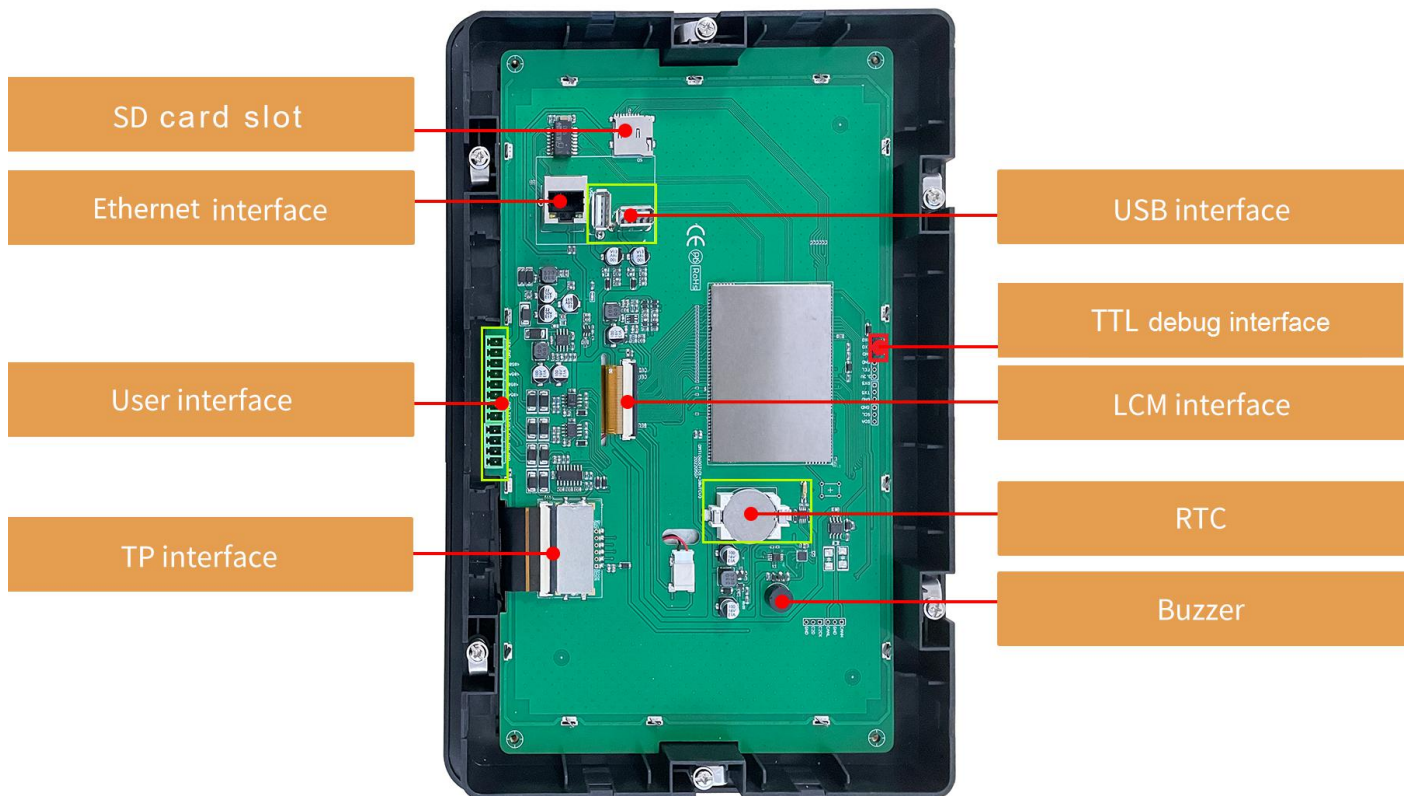
| Properties | Conditions | Min | Typ. | Max | Unit |
|-------------------------------------|-----------------------------|-----|------|-----|------|
| Power Voltage | - | 9.0 | 12.0 | 23 | V |
| Operation Current | VCC = +12V, 100% brightness | - | 440 | - | mA |
| | VCC = +12V, Backlight off | - | 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 $\pm 8KV$ | | | | |
| EFT | Group pulse interference $\pm 2KV$ | | | | |

● Peripheral and Interfaces

| Properties | Parameters | Description |
|--------------------|-------------|---|
| COM | 2-way RS232 | UART1 & UART2 |
| | 2-way RS485 | UART3 & UART4 |
| 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 | Button cell for power supply, 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.

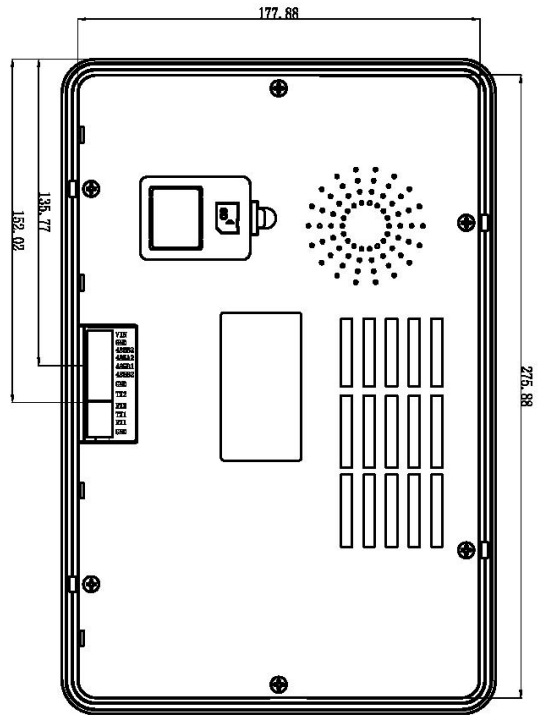
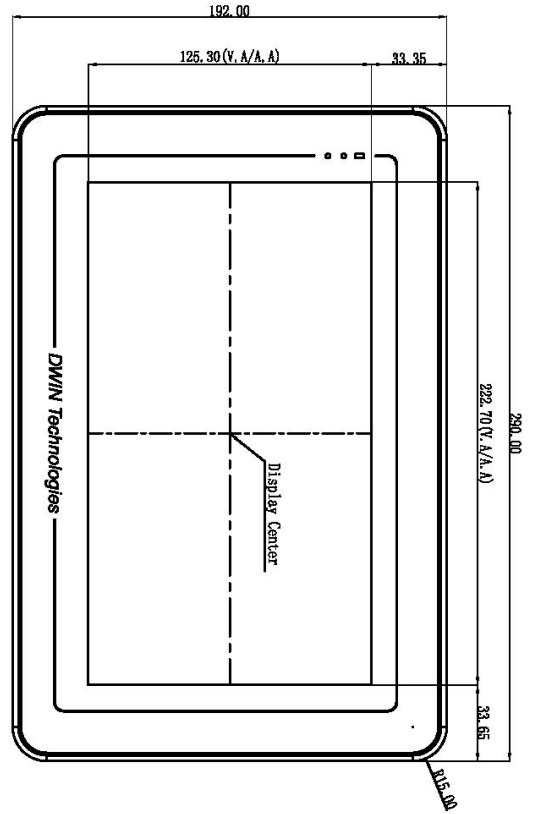
● Interface Parameters

| 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, RS485*2 | | | | |
| 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) | 1 | 1 | 1 |
| Carton4: | 450mm(L)*350mm(W)*300mm(H) | 1 | 5 | 5 |
| Carton5: | 600mm(L)*450mm(W)*300mm(H) | 1 | 8 | 8 |

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



| Definition | Pin# | I/O | Description |
|------------|----------|-----|-------------|
| VIN | 1 | P | Power Input |
| GND | 2, 7, 12 | P | GND |
| 485B2 | 3 | B- | 485- |
| 485A2 | 4 | A+ | 485+ |
| 485B1 | 5 | B- | 485- |
| 485A1 | 6 | A+ | 485+ |
| TX2 | 8 | 0 | UART2 DOUT |
| RX2 | 9 | 1 | UART2 DIN |
| TX1 | 10 | 0 | UART1 DOUT |
| RX1 | 11 | 1 | UART1 DIN |

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

| | | | | |
|--------------------------|--------------------|----------|------|------|
| Model | DMT10600T101-38WTC | | | |
| Drawing | A 4 | Drawn | DWIN | Date |
| Scale | 1:1 | Review | | Date |
| Date | | 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

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