

DMT10600T070_35WTC



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 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, 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

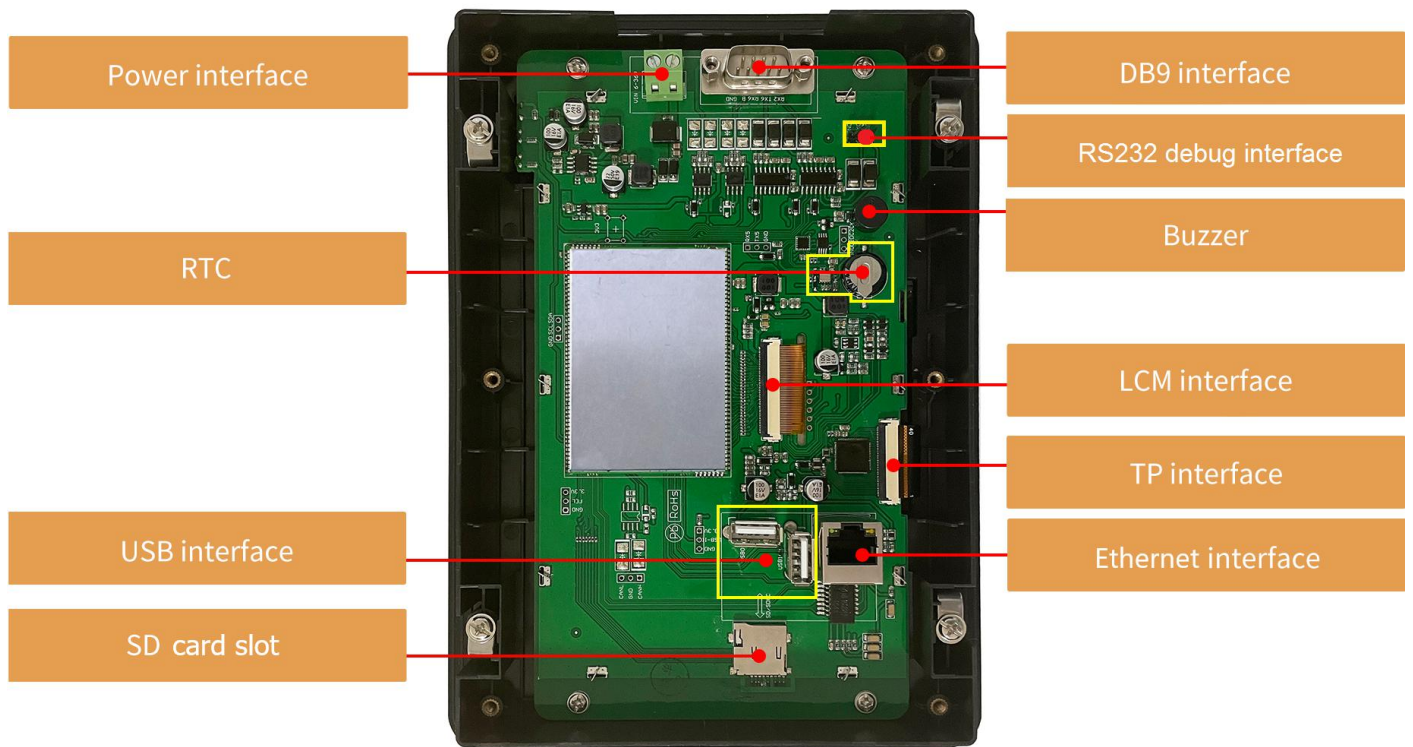
| Properties | Conditions | Min | Typ. | Max | Unit |
|---------------------------------------|-----------------------------|-----|------|-----|------|
| Power Voltage | - | 9.0 | 12.0 | 23 | V |
| Operation Current | VCC = +12V, 100% brightness | - | 280 | - | mA |
| | VCC = +12V, Backlight off | - | 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°C |
| 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 |
| 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 |

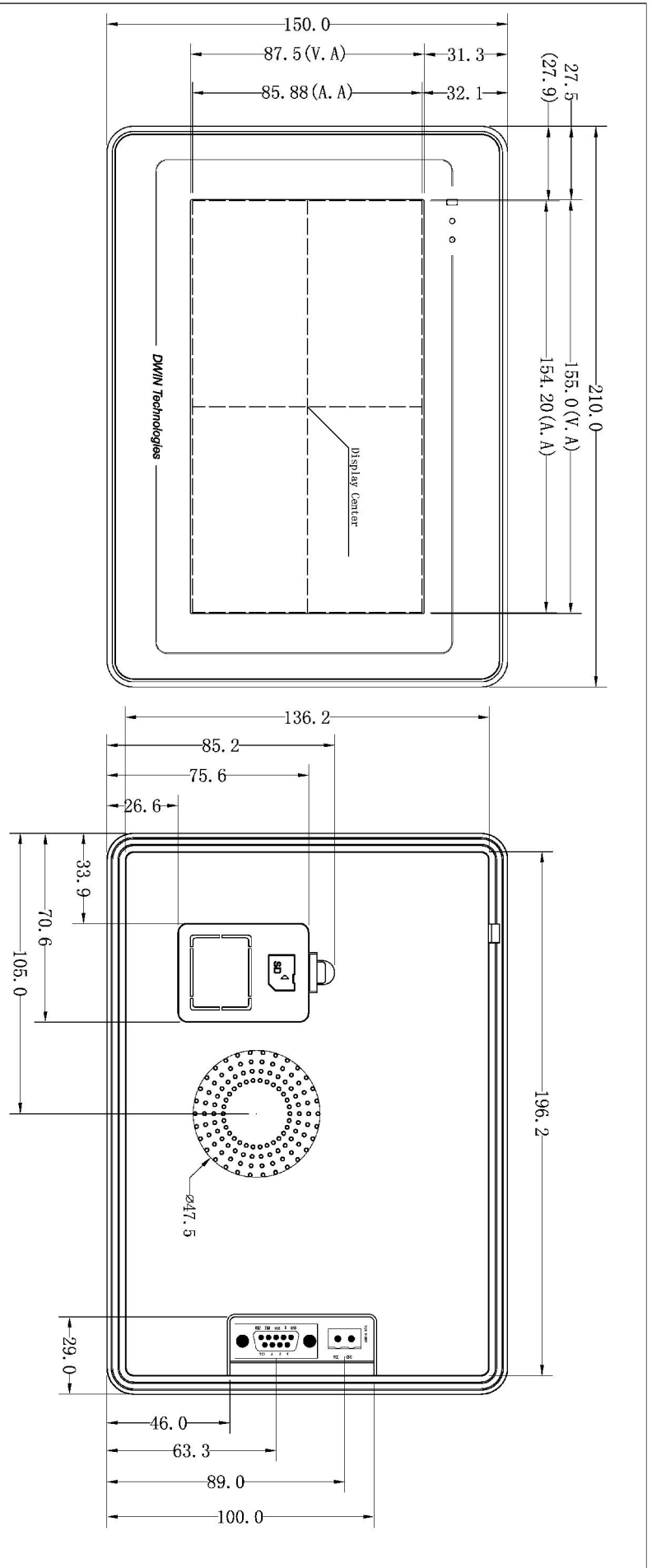
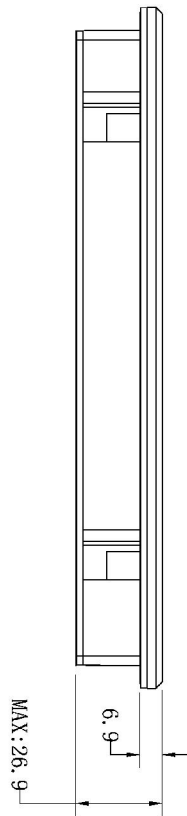
Disclaimer: The product design is subject to alternation and improvement without prior notice.

| 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 | DOUT |
| A | 7 | - | RS422 |
| Z | 8 | - | RS422 |
| Y | 9 | - | RS422 |

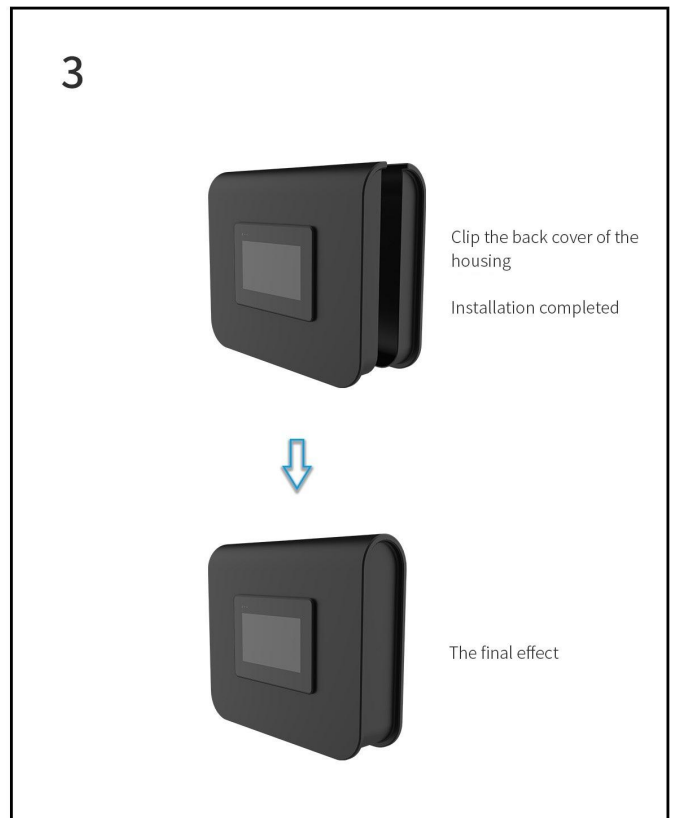
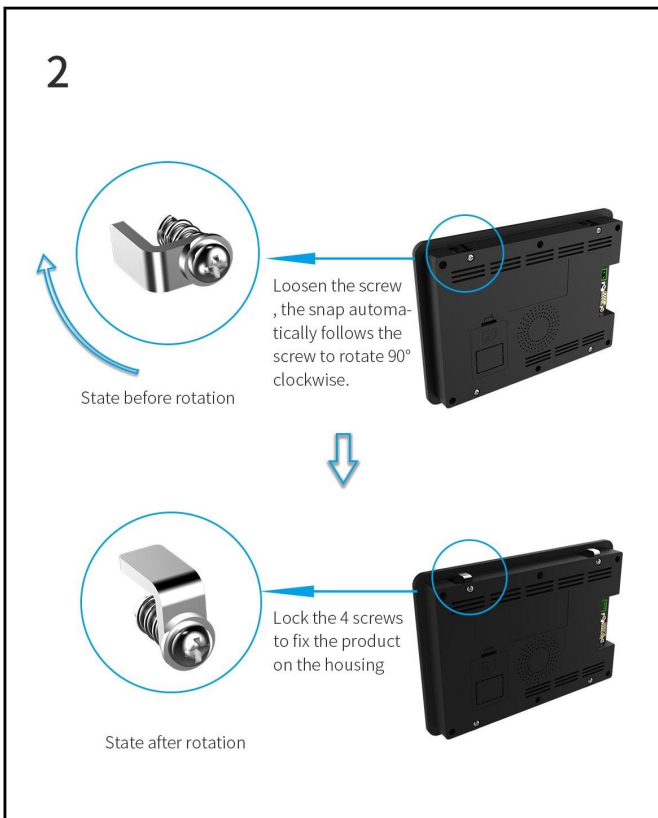
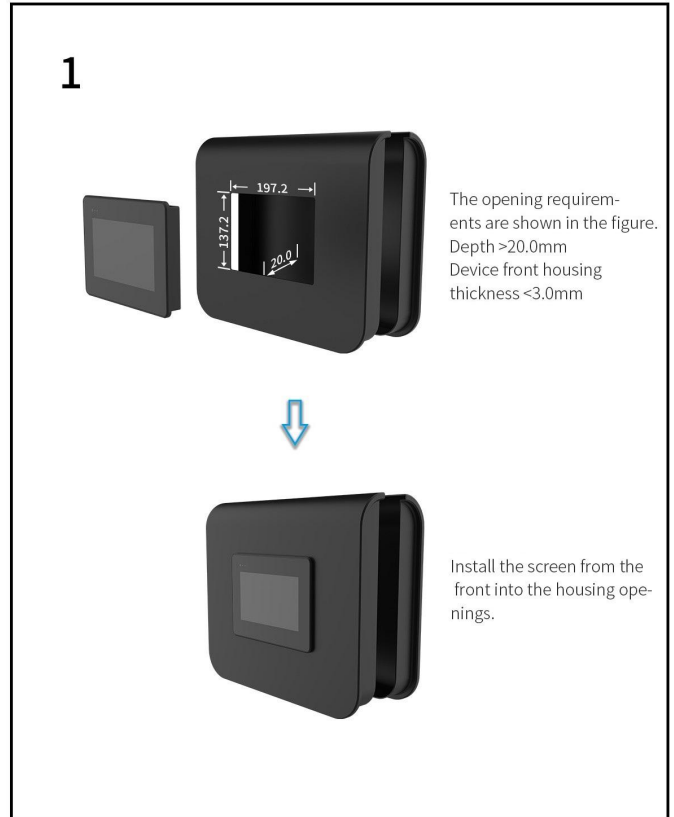
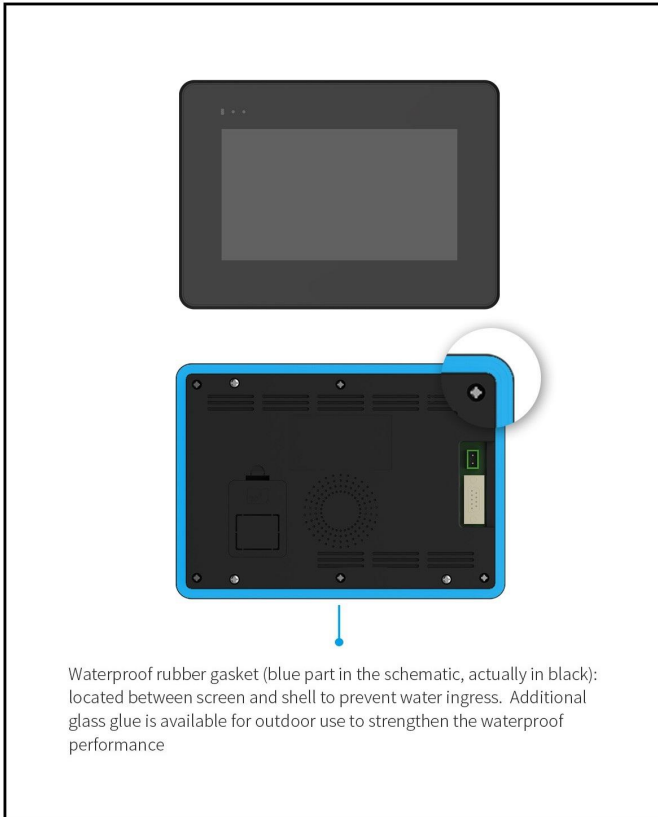
| Definition | Pin# | Type | Description |
|------------|------|------|-------------|
| VCC | 1 | P | Power Input |
| GND | 2 | P | GND |

| Model | | DWIN | | Date | | Beijing DWIN Technology Co., Ltd |
|---------|-----|----------|------|------|--|----------------------------------|
| Drawing | A 4 | Drawn | DWIN | Date | | |
| Scale | 1:1 | Review | | Date | | |
| Unit | MM | Approval | | Date | | |

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



Installation Schematic



Revision records

| Rev | Revise Date | Content | Editor |
|------------|--------------------|--|---------------|
| 00 | 2022-10-25 | 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:

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>

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