



High Resolution Touch Screen 800x1280 Pixels MIPI Interface 16M Color TFT Display

Our Product Introduction

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Basic Information

- Place of Origin: China, Shenzhen
- Brand Name: Chenghao Optoelectronic
- Certification: CE RoHS
- Model Number: CH101WX05A-CTC
- Minimum Order Quantity: 100 Pcs
- Packaging Details: All the products are packed in right way to keep it safe. For small sizes of products we use tray + carton, For bigger sizes we use foam slot + carton. we also design packages according to customers' requirements
- Delivery Time: 7-15 working days
- Supply Ability: 300Kpcs/month



Product Specification

- Product Name: High Resolution Touch Screen
- Visible Area Size: 135.66 * 216.88 Mm
- Module Size: 156 * 242 * 5.85 Mm
- Storage Temperature: -30 ~ +80 °C
- LCD Interface: MIPI
- Luminance: 300 Cd/m2
- Operating Temperature: -20 ~ +70 °C
- Viewing Direction: 80/80/80/80
- Display Mode: IPS /transmissive/ Normally Black
- Highlight: **High Resolution TFT Display ,
16M Color TFT Display ,
800x1280 Pixels TFT Display**



More Images



Product Description

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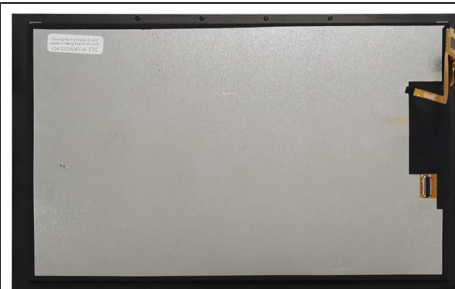
CH101WX05A-CTC is a 10.1-inch vertical screen color TFT LCD module designed for multi-scenario applications, with high cost performance and stable performance as its core advantages. Its 800×1280 resolution combined with IPS wide viewing angle technology (80/80/80/80) presents delicate picture quality and a wide viewing range, ensuring clear images and accurate colors whether it is multi-person collaboration to view data or complex interface operations. The MIPI-DSI interface is matched with the FH26-31S-0.3SHW connector to achieve high-speed and low-power data transmission, adapting to the efficient needs of smart devices while ensuring stable and reliable connections. The standard brightness of 300cd/m² provides a soft and comfortable visual experience in indoor environments, and with the transmissive and normally black display modes, it effectively reduces power consumption and extends the battery life of the device.



The module adopts a G+G capacitive touch screen solution, a composite structure of 2.0mm glass lens and 0.55mm ITO glass, and the total thickness of the module is only 5.85±0.3mm, which is both light and impact-resistant. The 6H hardness glass on the surface can resist daily wear and tear. It is equipped with a GT911 touch chip, supports precise multi-touch response, and operates sensitively and smoothly.

In terms of environmental adaptability, CH101WX05A-CTC can work stably in a wide temperature range of -20°C to 70°C, and the storage temperature is extended to -30°C to 80°C, which is suitable for harsh environments such as outdoor and industrial.

The module complies with RoHS environmental protection standards, has a compact structure, and is easy to integrate into industrial control terminals, vehicle information systems, commercial display equipment and other fields. Whether it is used as a human-computer interaction interface for smart factories or an information display screen for vehicle navigation, CH101WX05A-CTC provides users with efficient and stable display and touch solutions with reliable performance and high cost performance.



Features:

*** 10.1-inch vertical screen IPS display architecture**

Adopts 800×1280 high-resolution IPS panel, with 80/80/80/80 wide viewing angle technology, to ensure accurate color reproduction of the picture, no brightness and color deviation within the viewing angle range, suitable for multi-person collaboration or complex interface operation scenarios.

*** 300cd/m² brightness and energy-saving display mode**

The standard brightness of 300cd/m², combined with the transmissive and normally black display modes, provides soft and clear visual effects in indoor environments, while reducing power consumption, extending device life, and adapting to battery-powered portable devices.

*** G+G capacitive touch solution**

Adopts 2.0mm glass lens and 0.55mm ITO glass composite structure, the total thickness of the module is only 5.85±0.3mm, the surface 6H hardness glass is scratch-resistant, equipped with GT911 touch chip, supports accurate multi-touch response, and the touch operation is sensitive and smooth.

*** MIPI-DSI high-speed interface and dedicated connector**

Equipped with MIPI-DSI interface, supports high-speed and low-power data transmission, and is equipped with FH26-31S-0.3SHW connector to ensure stable and reliable signal transmission, and adapt to the efficient data processing needs of modern smart devices.

*** Wide temperature range environmental adaptability**

The operating temperature range is -20°C to 70°C, and the storage temperature is -30°C to 80°C. It can adapt to high temperature difference environments such as outdoor and industrial environments, and ensure that the equipment can operate stably for a long time under extreme conditions.

*** Lightweight and compact modular design**

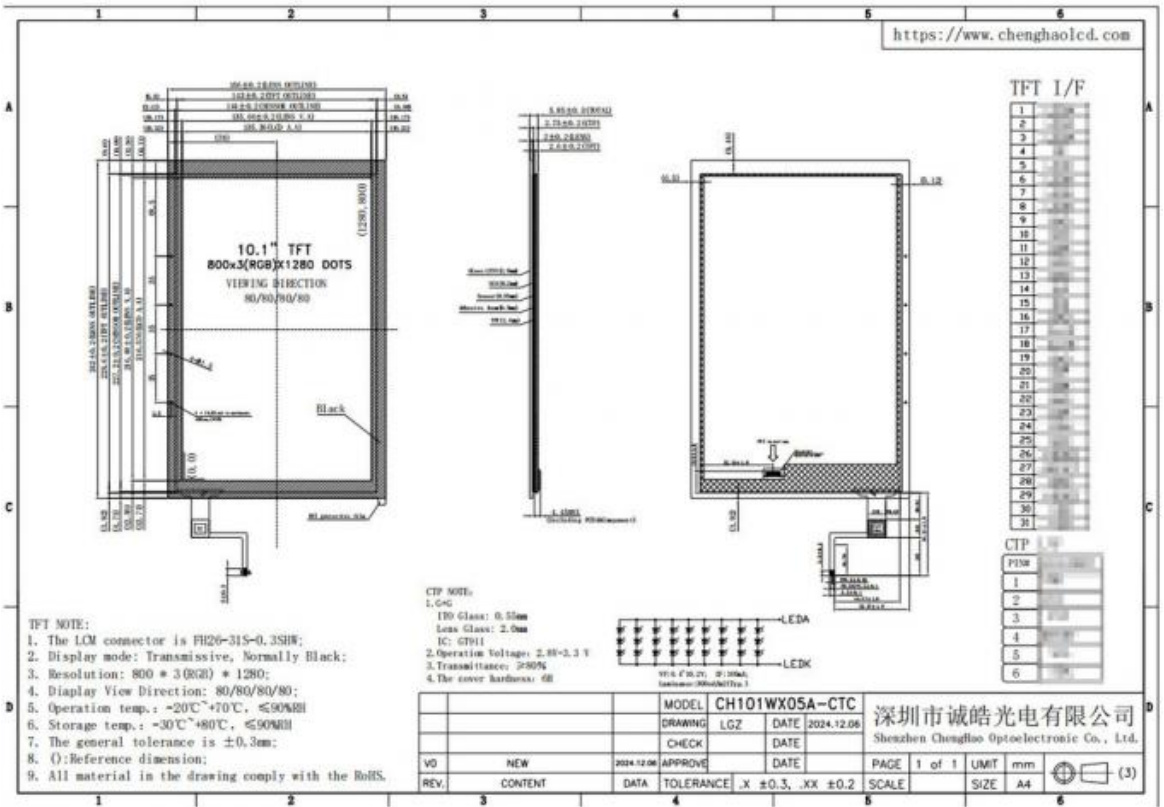
The overall thickness is only 5.85mm, and the lightweight structure is easy to integrate into space-constrained devices, such as vehicle-mounted central control, handheld terminals, etc. At the same time, the impact resistance is improved through precise structural design.

*** Environmental protection and reliability certification**

Complies with RoHS environmental protection standards and materials are safe; after strict vibration, drop and environmental tests, it ensures that the product can operate stably in scenarios with high reliability requirements such as industry and medical.

Technical Parameters:

Touch Panel Type	Capacitive
Visible area size	135.66 * 216.88 mm
Luminance	300 Cd/m2
Resolution	800*1280 Dots
Display Mode	IPS /transmissive/ Normally Black
Active area size	135.36 * 216.576 mm
Operating Temperature	-20 ~ +70 °C
LCD Interface	MIPI
Viewing Direction	80/80/80/80
Storage Temperature	-30 ~ +80 °C



Applications:

- * Intelligent agricultural equipment monitoring
In agricultural machinery (such as combine harvesters and seed drills), the wide temperature range of CH101WX05A-CTC (-20°C to 70°C) can cope with temperature fluctuations in the farmland environment, and the high-brightness screen can still clearly display operating parameters (such as harvesting progress and seeding amount) under direct sunlight. The vertical screen design is convenient for displaying multiple sets of real-time data, and the IPS wide viewing angle allows operators to quickly read information from different angles, improving the accuracy and efficiency of agricultural operations.
- * Cold chain logistics temperature monitoring terminal
In cold chain transportation, the module's -20°C low temperature adaptability ensures stable operation in refrigerated trucks or cold storage environments. The high-resolution screen clearly displays key information such as cargo temperature and location, and the vertical screen layout is suitable for displaying long strip data lists, which is convenient for logistics personnel to quickly check. The thin and light design is easy to integrate into portable cold chain monitoring equipment, supports real-time data upload, and ensures the transportation safety of cold chain goods such as fresh food and medicine.
- * Medical mobile ward rounds
In hospital scenarios, CH101WX05A-CTC can be used as a display terminal for mobile ward rounds. The 10.1-inch vertical screen is suitable for displaying electronic medical records, imaging data or test reports, and the IPS wide viewing angle is convenient for medical staff to check and diagnose. The G+G touch screen supports fast page turning and annotation, the 300cd/m² brightness is soft and eye-protecting indoors, and the wide temperature performance ensures that the equipment can operate stably in different areas of the hospital (such as normal temperature wards and low temperature laboratories).
- * Outdoor fitness equipment interactive screen
In outdoor gyms or sports equipment, the high-brightness screen (300cd/m²) of this module clearly displays sports data (such as heart rate, calorie consumption) under natural light, and the wide temperature range is suitable for all-weather outdoor environments. The vertical screen design is suitable for displaying sports tutorials or virtual coach interfaces, and the capacitive touch screen supports

operation with gloves, which improves the user experience in different weather conditions.

*** Ship and marine equipment control interface**

In the ship cockpit or marine exploration equipment, the wide temperature performance of CH101WX05A-CTC (-20°C to 70°C) can withstand high humidity and large temperature difference marine environment. The IPS wide viewing angle ensures that the crew can view the navigation map and equipment status at different angles, and the high resolution clearly presents complex sea conditions data. The thin and light structure is easy to integrate into the ship console, and the low power consumption characteristics of the MIPI interface reduce the energy consumption of the equipment, which is suitable for long-term operation at sea.

Customization:

The CH101WX05A-CTC display module offers a variety of customization options to meet customers' specific needs in different application scenarios. The following are the main customization contents of this product:

Module size and shape: We can adjust the size and shape of the module according to the specific requirements of customers to ensure that it fits the customer's device perfectly. This flexibility enables the CH101WX05A-CTC to be effectively used in space-constrained environments.

Backlight brightness adjustment: The backlight brightness of the CH101WX05A-CTC can be customized according to customer needs, with a maximum brightness of up to 300 cd/m². Customers can choose the brightness suitable for their application environment to ensure optimal visibility under different lighting conditions.

Interface type customization: The module supports customization of multiple interface types, including MIPI, SPI, etc. Customers can choose the appropriate interface type according to the compatibility of their devices to achieve better data transmission and control.

Touch solution: For customers who need touch function, we provide customization options for capacitive and resistive touch panels. Customers can choose the touch technology that suits their application needs to enhance the user interaction experience.

Packaging design: We also provide customized packaging services, and customers can choose different packaging materials and designs according to brand image and transportation needs. This customization ensures the safety of the product during transportation while enhancing the brand's market image.

Transportation method selection: When shipping, we support customer-specified transportation methods to better meet their supply chain management needs. This flexibility ensures that the product can be delivered to customers in a timely and safe manner.

Through these customization options, CH101WX05A-CTC is able to provide customers with more targeted solutions to meet the needs of different industries and applications, thereby enhancing the value of the product and user experience

FAQ:

Q: What is the operating humidity range of the product? Is it suitable for use in high humidity environments?

A: The operating humidity of CH101WX05A-CTC is ≤90% RH (non-condensing), which is suitable for most indoor and outdoor environments. If used in a high humidity environment, it is recommended to use a sealed housing or moisture-proof measures to ensure long-term reliability.

Q: Does technical support provide remote diagnostic services?

A: Yes, our technical team can assist customers in diagnosing problems through remote tools (such as remote desktop, video conferencing), quickly locate faults such as software configuration and driver compatibility, and provide real-time solutions.

Q: Does the product have anti-glare or anti-fingerprint coating?

A: The standard version is not equipped with anti-glare or anti-fingerprint coating, but its high transmittance (≥80%) and 300cd/m² brightness can provide clear display in most environments. If special coating is required, you can contact the technical team to customize it to meet the needs of outdoor strong light or frequent touch scenes.

Q: Is a reliability test report for the product provided?

A: Yes, we can provide reliability test data of CH101WX05A-CTC, including high and low temperature cycle, vibration test, anti-static. Life test, etc., to prove its stability under harsh conditions such as -20°C to 70°C, so that customers can evaluate the adaptability of application scenarios.

Q: How to deal with the response time of technical support during non-working hours?

A: We provide 6×8 hours (working days) technical support. You can leave a message through the official email or emergency contact number during non-working hours. After receiving the information, we will give priority to respond within the first working day to ensure that customer problems are solved in a timely manner.



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