# 10.1 Inch IPS LCD Screen MIPI Display Touch Screen 31 Pins 1280x800 Display Mode IPS /transmissive/ Normally Black

## **Basic Information**

Place of Origin:

6

- Brand Name: Chenghao Optoelectronic
- Certification: CE RoHS
- Model Number:
- Minimum Order 100 Pcs
   Quantity:
- Packaging Details: All the products are packed in right way to keep it safe. For small sizes of products we
  - 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

China,Shenzhen

CH101WX05A-CTC

• Delivery Time: 7-15 working days

300Kpcs/month

Supply Ability:



## Product Specification

• Product Name: 10.1 Inch IPS Lcd Screen • LCD Interface: MIPI 300 Cd/m2 • Luminance: • Viewing Direction: 80/80/80/80 • Storage Temperature: -30 ~ +80 °C • Display Mode: IPS /transmissive/ Normally Black • Touch Panel Type: Capacitive Active Area Size: 135.36 \* 216.576 Mm Resolution: 800\*1280 Dots • Highlight: 1280x800 IPS LCD Screen,

> 10.1 Inch IPS LCD Screen, 31 Pins IPS LCD Screen



## More Images



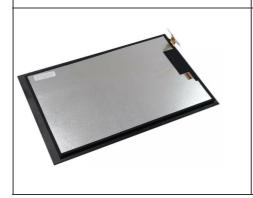
### **Product Description**

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CH101WX05A-CTC is a 10.1-inch vertical color TFT LCD module designed for diversified display needs. Its 800×1280 resolution with IPS wide viewing angle technology (80/80/80/80) ensures accurate color and wide viewing angle, suitable for shared viewing or complex operation scenarios. The typical brightness of 300cd/m<sup>2</sup> provides clear display in indoor environments, combined with transmissive and normally black display modes, effectively reducing power consumption and improving contrast. The MIPI interface design supports high-speed data transmission and low-power operation, adapting to the efficient needs of modern smart devices. The connector uses FH26-31S-0.3SHW to ensure connection stability.

This touch screen module uses a G+G capacitive touch screen and is equipped with a GT911 touch chip to support precise and sensitive multi-touch operation. Combined with a wide voltage input of 2.8V-3.3V, low power consumption and high compatibility are guaranteed. The composite structure of 2.0mm glass lens and 0.55mm ITO glass has a total module thickness of only 5.85±0.3mm, which is both light and durable. The 6H hardness of the touch screen surface can resist daily scratches.





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 range is extended to -30°C to 80°C, which is suitable for harsh environments such as outdoor and industrial. In addition, the module complies with RoHS environmental protection standards and has a compact structural design. It is suitable for integration into smart home control terminals, vehicle information systems, industrial control panels and other equipment, providing users with reliable display and interaction solutions.

### **Features:**

10.1-inch vertical screen IPS display: adopts 800×1280 high-resolution IPS technology, with 80/80/80/80 wide viewing angle design, ensuring accurate color and consistent viewing angles, suitable for multi-person collaboration or complex operation scenarios.
300cd/m<sup>2</sup> brightness and energy-saving mode: typical brightness of 300cd/m<sup>2</sup>, combined with transmissive and normally black display modes, provides clear vision in indoor environments while reducing power consumption and improving energy efficiency.
G+G capacitive touch screen: adopts a composite structure of 2.0mm glass lens and 0.55mm ITO glass, with a total thickness of only 5.85±0.3mm, a surface hardness of 6H, strong scratch resistance, supports precise multi-touch operation, and is equipped with a GT911 chip to ensure sensitive response.

MIPI high-speed interface and stable connection: Equipped with MIPI-DSI interface, it supports high-speed and low-power data transmission, and is equipped with FH26-31S-0.3SHW connector to ensure the stability and reliability of signal transmission. Wide temperature range environmental adaptability: It can work stably in a wide temperature range of -20°C to 70°C, and the storage temperature range is extended to -30°C to 80°C, which can meet the use requirements of high temperature difference environments such as outdoor and industrial.

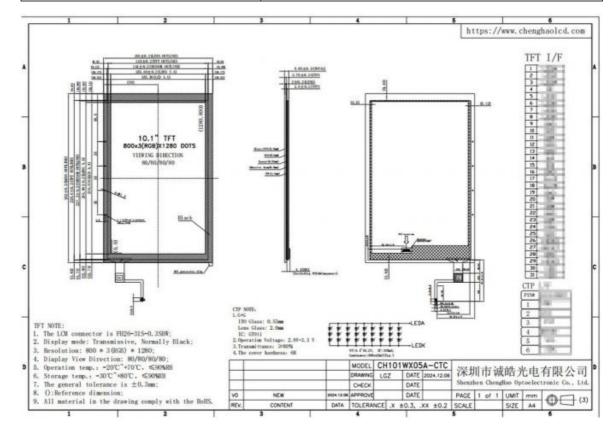
**High transmittance and wide voltage compatibility:** Optical transmittance  $\geq$ 80%, the picture is transparent and natural; the touch panel supports 2.8V-3.3V wide voltage input, strong compatibility, and adapts to a variety of equipment power solutions.

Lightweight and compact structural design: The overall thickness is only 5.85mm, and the lightweight design is easy to integrate into portable devices or space-constrained application scenarios, which improves the flexibility of equipment design.

Environmental protection and reliability certification: It complies with RoHS environmental protection standards to ensure material safety; after strict environmental testing, it guarantees long-term stability and is suitable for industrial and medical fields with high reliability requirements.

**Technical Parameters:** 

-30 ~ +80 °C
80/80/80
135.66 * 216.88 Mm
IIC
156 * 242 * 5.85 Mm
Capacitive
IPS /transmissive/ Normally Black
-20 ~ +70 °C
MIPI
300 Cd/m2



### **Applications:**

#### (1) In-vehicle infotainment system

In the in-vehicle scenario, the vertical screen design of CH101WX05A-CTC fits the layout of the in-vehicle center console, making it easy for the driver to view navigation, music and other information. The IPS wide viewing angle reduces reflective interference and ensures visibility at different driving angles; the high-speed transmission of the MIPI interface supports real-time traffic data loading, and the wide temperature performance of -20°C to 70°C can cope with high temperature exposure or low temperature environment in the car, improving the reliability of the in-vehicle system.

#### (2) Commercial advertising and digital signage

In shopping malls, restaurants and other places, the module's high resolution and color expression can vividly display advertising content. The vertical screen design is suitable for playing long strips of advertisements or dynamic information, and the brightness of 300cd/m<sup>2</sup> is clear and eye-catching under indoor lighting. The thin and light structure is easy to integrate into wall or vertical advertising machines, and the low power consumption characteristics of the MIPI interface reduce operating costs and are suitable for long-term playback.

#### (3) Portable medical diagnostic equipment

In the medical field, CH101WX05A-CTC can be used in portable ultrasound equipment or mobile diagnostic terminals. The vertical screen display makes it easy for doctors to view image slices or data charts, and the IPS wide viewing angle ensures the consistency of the picture during multi-person consultations. The G+G touch screen supports precise operation, and the wide temperature range is suitable for scenarios with large temperature differences such as hospital cold storage or outdoor diagnosis and treatment, which improves the flexibility of medical equipment.

#### (4) Industrial Internet of Things (IIoT) terminal

In industrial environments, this module can be used as a device monitoring screen or human-computer interaction interface. The vertical screen design is suitable for displaying multiple sets of real-time data (such as production line status, sensor parameters), and the IPS wide viewing angle allows operators to quickly read information from different angles. The wide temperature performance and antiinterference ability (RoHS certified) ensure the stable operation of the equipment in high temperature, dust or electromagnetic interference environments in the factory, and the MIPI interface supports efficient communication with industrial controllers.

Through the above diverse application scenarios, CH101WX05A-CTC provides reliable display and interaction solutions for different industries with its performance advantages and adaptability.

### Support and Services:

The CH101WX05A-CTC display module not only excels in technical specifications, but also provides comprehensive support and services to ensure that customers have the best experience during use. We are committed to providing customers with efficient and professional services. The following are the main support contents we provide:

(1) Technical consultation: Our technical team is always ready to provide customers with professional technical consultation services. Whether it is product selection, installation guidance or functional application, customers can contact us by email or phone to get timely answers and suggestions.

(2) Customization service: The CH101WX05A-CTC module supports a variety of customization options, including module shape, backlight brightness and interface type. Our engineers will work closely with customers to ensure that the customized solution meets specific application requirements, thereby improving the applicability and performance of the product [1].

Warranty and after-sales service: We provide a one-year warranty service for the CH101WX05A-CTC to ensure the reliability of the product under normal use. If any quality problems occur during the warranty period, we will provide free repair or replacement services to ensure that the rights and interests of customers are protected [2].

(3) Sample support: In order to help customers evaluate before making a purchasing decision, we provide sample application services. Customers can apply for samples for testing to confirm whether the product meets their needs.

(4) Feedback and improvement: We value customer feedback and regularly collect user experience and suggestions to continuously improve our products and services. Customer satisfaction is our goal, and we will continuously optimize product performance and service quality based on feedback.

Through the above support and services, CH101WX05A-CTC is not only a high-performance display solution, but also a reliable partner for customers in various applications. We look forward to working with customers to jointly promote technological progress and innovation

### FAQ:

Q: Is the brightness of 300cd/m<sup>2</sup> suitable for outdoor use? How is the display effect under strong light? A: The typical brightness of 300cd/m<sup>2</sup> is designed mainly for indoor environments, such as conference rooms, shopping malls or car center consoles. If you need to use it outdoors, it is recommended to use a sunshade or choose a customized version with higher brightness (need to contact technical support for confirmation).

Q: Can the 6H hardness of the G+G touch screen resist daily scratches? What is the service life? A: The 6H hardness can effectively resist general scratches and wear and tear, and is suitable for most commercial or industrial environments. Under normal use, the touch screen life can reach more than 5 million touch operations, and the specific life is affected by the frequency of use and the environment.

Q: Does the wide temperature range of the product (-20°C to 70°C) require additional protection measures? A: This wide temperature design can adapt to conventional extreme temperature environments, such as car-mounted and outdoor equipment, without additional protection. If you need to use it under more severe conditions (such as below -40°C), you can contact the technical team to customize a cold-resistant version.

Q: How long is the warranty period of the product? In what cases can it be repaired free of charge during the warranty period? A: CH101WX05A-CTC provides a 12-month warranty service. During the warranty period, non-human damage (such as material defects, workmanship problems) can be repaired or replaced free of charge; failures caused by human damage or force majeure will be charged a reasonable repair fee.

Q: How long is the after-sales service response time? Is technical support provided? A: We promise to respond within 24 hours after receiving customer feedback and provide solutions within 48 hours. The technical support team can assist customers in solving problems such as product integration and parameter debugging, and provide remote guidance or on-site support (according to project requirements).

Q: Are product technical documents and drivers provided? A: Yes, we will provide detailed technical documents with the product, including specifications, interface definitions, mechanical dimension drawings, etc.

Q: Can the screen parameters (such as brightness, interface type) be customized according to customer needs? A: Customized services are supported. For example, the brightness can be adjusted to a higher level (need to confirm feasibility), or the interface type can be changed according to demand (such as changing from MIPI to RGB). The specific customization plan needs to be communicated with the technical team, and we will evaluate and provide the best solution.

Q: Is the product's transportation packaging shockproof? How to ensure transportation safety? A: We use professional shockproof packaging, the inner layer uses foam or air cushion to protect the screen, and the outer layer is a reinforced carton to ensure that it is not damaged by vibration or collision during transportation.

Q: Does CH101WX05A-CTC meet environmental protection standards? Is the material safe?

A: Yes, the product fully complies with RoHS environmental protection standards, and all materials have passed the hazardous substance test to ensure green safety. At the same time, our production process strictly follows the ISO 9001 quality management system to ensure product quality and compliance.



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