



## 7 Inch Sunlight Readable Display Touch Screen 1024x600 Pixels TFT Lcd Module

### Our Product Introduction

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#### Basic Information

- Place of Origin: China Shenzhen
- Brand Name: Chenghao Optoelectronic
- Certification: CE RoHS FCC
- Model Number: CH700WS10E-CTA
- Minimum Order Quantity: No Moq
- 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: 3~7 Days
- Payment Terms: TT or Others
- Supply Ability: 20000000 pcs/month



#### Product Specification

- Product Name: Sunlight Readable Display Touch Screen
- Resolution: 1024\*600 Dots
- Touch Type: Capacitive
- Lcd Interface: RGB
- Color: 16.7M
- Lcd Type: 7"TFT + CTP
- Viewing Direction: 80/80/80/80
- Touch Panel Interface: IIC
- Brightness: 1000 Cd/m2 Luminance
- Highlight: Sunlight Readable Display Touch Screen, 1024x600 Pixels TFT Lcd Module, 7 Inch TFT Lcd Module



#### More Images





## Product Description

### Product Description:

CH700WS10E-CTA is a 7.0-inch horizontal color TFT LCD module that utilizes IPS display technology and boasts a high brightness of 1000cd/m<sup>2</sup>. This allows for clear and bright picture display even in bright light settings. The 160° wide viewing angle design ensures consistent viewing from multiple angles, with full and vivid color performance that is ideal for applications with stringent visual experience requirements.

The module comes with an RGB interface and I2C touch interface to support stable data transmission and responsive touch interaction. Equipped with a GT911 chip, the capacitive touch screen provides accurate response and multi-touch support, enhancing device operation convenience. The touch glass cover features a composite structure of 0.7mm glass lens and ITO glass for a balance of lightness and durability. It also has a 6H hardness surface protection for effective resistance against daily wear and tear. The touch glass cover's transmittance is ≥87%, coupled with the 1000cd/m<sup>2</sup> brightness, ensuring a transparent and natural display. Additionally, the touch panel supports a wide voltage input range of 2.8V-3.3V for strong compatibility.

Performance-wise, CH700WS10E-CTA offers a wide operating temperature range of -20°C to 70°C, enabling stable operation in extreme environments. The storage temperature range is extended to -30°C to 80°C, showcasing excellent environmental adaptability. The module has obtained RoHS environmental certification and complies with international standards.

Whether for industrial control terminals, outdoor display equipment, or medical instruments, CH700WS10E-CTA delivers efficient and stable display solutions with high brightness, wide temperature range, compact design, and reliable performance to cater to diverse market needs.

### Features:

**7.0-inch IPS vertical screen design:** Utilizing IPS technology and standard black mode, this display showcases high-contrast images with precise color replication, making it ideal for scenarios with stringent display requirements.

**Ultra-high brightness and wide viewing angle:** Boasting a typical brightness of 1000cd/m<sup>2</sup>, this screen remains clearly visible even under strong lighting conditions; its 160° full viewing angle design guarantees uniform image quality from various perspectives.

**Wide temperature range adaptability:** This display can function within a broad operating temperature range of -20°C to 70°C, with storage capabilities extended to -30°C to 80°C, allowing it to adapt to environments with high temperature variations such as outdoor and industrial settings.

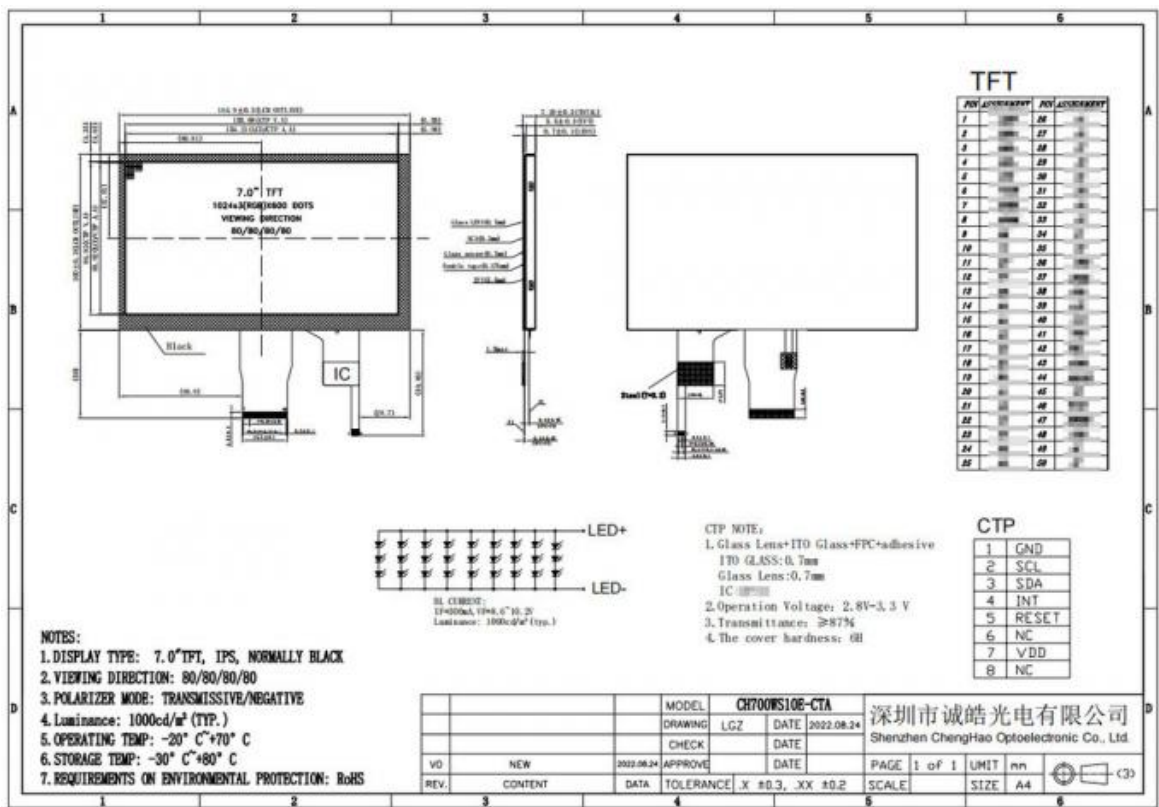
**Capacitive touch and precise response:** Equipped with a capacitive touch screen featuring the GT911 chip, supporting multi-touch functionality, this display yields sensitive and precise interactions, enhancing the user experience.

**Lightweight and sturdy Touch Cover:** Featuring a composite design comprising a 0.7mm glass lens and ITO glass with a surface hardness of 6H, this cover is both lightweight and scratch-resistant.

**High transmittance and energy-saving design:** The touch glass cover boasts an optical transmittance of ≥87%, ensuring a transparent and natural display; the touch panel supports a wide voltage input of 2.8V-3.3V, providing strong compatibility and optimized power consumption.

**Stable interface configuration:** Incorporating an integrated RGB signal interface and I2C touch control interface, this display ensures stable data transmission, simplifying device integration and development.

**Environmental protection and reliability:** Certified with RoHS environmental standards and compliant with international regulations, this display features a compact structure and has undergone rigorous testing to guarantee long-term stability.



### Technical Parameters:

Parameter	Value
Color	16.7M
Lcd Interface	RGB
Storage Temperature	-30 ~ +80℃
Resolution	1024*600 Dots
Brightness	1000 Cd/m2 Luminance
Viewing Direction	80/80/80/80
Display Mode	IPS/Transmissive/Normally Black
Operating Temperature	-20 ~ +70℃
Lcd Type	7"TFT + CTP
Touch Type	Capacitive

### Applications:

#### Agricultural machinery and outdoor equipment

The 1000cd/m<sup>2</sup> high-brightness display screen of CH700WS10E-CTA can effectively resist strong outdoor light, ensuring that agricultural machinery operators can clearly read equipment parameters (such as seeding amount, fertilization progress, etc.) under direct sunlight. Its wide temperature adaptability from -20℃ to 70℃ can cope with the drastic temperature changes in the farmland environment, and the sturdy 6H hardness glass surface can resist the erosion of pollutants such as dust and mud, ensuring long-term stable operation under harsh agricultural conditions.

#### Vehicle and construction machinery control panel

The IPS wide-viewing angle technology of this module allows drivers to easily view vehicle information (such as fuel consumption, tire pressure, navigation route) at different angles, and the vertical screen design is more in line with the operating habits of the vehicle interface. The wide temperature range characteristics enable it to adapt to the high temperature (summer sun exposure) and low temperature (winter cold) of the vehicle environment, while the high brightness and high transmittance ensure that the picture is clearly visible when driving in strong light or at night, improving driving safety.

#### Fitness and sports equipment consoles

In gyms or outdoor fitness equipment, the capacitive touch screen of CH700WS10E-CTA supports precise touch operation, allowing users to easily adjust exercise modes and view heart rate and other data. The high-brightness screen can maintain clear display under indoor lighting or outdoor sunlight, and the wide temperature performance ensures that the equipment can operate stably in an all-weather environment, meeting the diverse usage scenarios of fitness enthusiasts.

#### Logistics and warehousing mobile terminals

The handheld terminals in the logistics industry need to frequently scan codes and enter information outdoors. The high-brightness screen of CH700WS10E-CTA can still clearly display cargo information under strong outdoor light, improving scanning efficiency. Its light and thin design and sturdy structure are suitable for long-term handheld operation, and the wide temperature range ensures that the

equipment can continue to work in complex environments such as cold storage (low temperature) or transport vehicles (high temperature), improving the reliability of logistics operations.

#### Smart retail and unmanned cargo containers

In unmanned cargo containers in convenience stores, airports and other places, the module's high resolution and bright colors can vividly display product images and prices to attract customers' attention. The capacitive touch screen supports smooth self-service shopping operations, and the high-brightness screen can clearly present content under different lighting conditions indoors and outdoors. The wide temperature performance ensures that the device can operate stably in an environment with a large temperature difference between day and night, improving the user experience of unmanned retail.

#### Portable medical monitoring equipment

For mobile medical equipment (such as portable ECG monitors and blood oxygen detectors), the high-brightness screen of the CH700WS10E-CTA can clearly display medical data curves, making it easier for medical staff to quickly identify abnormalities. Its wide temperature adaptability ensures that the device can work stably in scenarios such as ambulances and outdoor diagnosis and treatment, and its compact and lightweight design is suitable for the integration needs of portable medical equipment, improving the flexibility and efficiency of medical services.

## Customization:

The CH700WS10E-CTA is designed to meet diverse customer needs through a variety of customization options. Chenghao Optoelectronic prides itself on providing tailored solutions that enhance the functionality and adaptability of our display modules. Below are the key customization features available for the CH700WS10E-CTA:

- (1) Flexible FPC Design: We understand that every installation has unique requirements. Therefore, we offer the ability to redesign the Flexible Printed Circuit (FPC) to match the specific shape and structure needed for your equipment. This ensures a seamless integration into your system, enhancing performance and reliability.
- (2) Backlight Brightness Options: The display module can be customized with varying backlight brightness levels. While the standard brightness is set at 1000 cd/m<sup>2</sup>, we can modify this to meet specific application needs, including options for ultra-high brightness up to 1500 cd/m<sup>2</sup>. This feature is particularly beneficial for outdoor applications where sunlight readability is crucial.
- (3) Interface Customization: The CH700WS10E-CTA supports multiple interface types, including SPI, MCU, RGB, MIPI, LVDS, and HDMI. Customers can choose the interface that best fits their project requirements, allowing for greater compatibility with existing systems and enhancing overall functionality.
- (4) Touch Panel Solutions: For applications requiring user interaction, we provide options for both capacitive and resistive touch panels. The capacitive touch solution can be tailored with specific glass thickness, hardness, and shape to ensure optimal performance in your application environment. This flexibility allows for a more engaging user experience.
- (5) Functionality Enhancements: We can incorporate specific features into the display module based on your application needs. This includes options for sunlight readability, anti-glare coatings, wide temperature operation, and enhanced resolution capabilities. Such customizations ensure that the module performs effectively in various environmental conditions and meets the demands of your specific use case.
- (6) Packaging Customization: Understanding that presentation and protection during transport are vital, we offer packaging solutions that can be tailored to your specifications. This includes changes to packaging materials and methods, ensuring that the display modules arrive in perfect condition and meet your branding requirements.
- (7) Transportation Solutions: We can also adapt our shipping methods to align with your logistical preferences, ensuring that the delivery process is as efficient and cost-effective as possible. This level of customization extends beyond the product itself, enhancing the overall customer experience.

In conclusion, the CH700WS10E-CTA offers a comprehensive range of customization options designed to meet the specific needs of our customers. Whether it's adjusting the physical characteristics of the module or enhancing its functionality, Chenghao Optoelectronic is committed to providing solutions that align with your project requirements.

## FAQ:

### Q: What is the brand name of this TFT LCD Capacitive Touchscreen?

A: The brand name is Chenghao Optoelectronic.

### Q: What is the model number of this product?

A: The model number is CH700WS10E-CTA.

### Q: Where is this TFT LCD Capacitive Touchscreen manufactured?

A: It is manufactured in China, specifically in Shenzhen.

### Q: What certifications does this product have?

A: This product is certified with CE, RoHS.

### Q: What is the minimum order quantity for this product?

A: There is no minimum order quantity (No Moq) required for this product.



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