

7 Tft Screen 800x1280 Touch Lcm Liquid Crystal Module With Mipi Interface

Our Product Introduction

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Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: CE, ISO9001, Rose, SGS
- Model Number: CH700WX09A-CTA
- 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: 3~7 Days
- Payment Terms: T/T, AliPay, PayPal
- Supply Ability: 50000000 Pcs/month



Product Specification

- Contrast: 800:1
- Lcd Interface: MIPI
- Viewing Area Size: 151.22x94.7 Mm
- Touch Interface: IIC
- Module Size: 171.22x114.7x5.25 Mm
- Module Type: 7" TFT+CTP
- Number Of Dots: 800x3(RGB)x1280
- Touch Type: Capacitive
- Highlight: 7 inch TFT LCD touch screen, MIPI interface LCD module, 800x1280 resolution display module



More Images



Product Description

Product Description:

CH700WX09A-CTA is a high-performance 7-inch color TFT LCD module developed by Shenzhen ChengHao Optoelectronic Co., Ltd., integrating advanced display and capacitive touch (CTP) functionalities for versatile device integration. It features a 6.85-inch IPS normally black display panel with a resolution of 800×3(RGB)×1280, delivering crisp image details and vibrant color reproduction—complemented by a transmittance of $\geq 80\%$ that enhances light utilization, ensuring clear visuals even in low-light environments. The module's polarizer mode is set to transmissive/negative, which optimizes contrast under different lighting conditions, making it suitable for both indoor and semi-outdoor applications.



In terms of structural design, the module adopts a G+G (Glass+Glass) CTP configuration with a glass lens of 1.1mm thickness and a glass sensor of 0.55mm thickness, paired with OCA (0.2mm), PET (0.06mm), and SCA (0.2mm) layers for reliable touch response and durability; the cover hardness reaches 6H, effectively resisting scratches from daily use or cleaning. Its driver IC is **** for the TFT part and *** for the CTP part, with an I/O voltage of 3.3V ensuring compatibility with most mainstream control boards. Key dimensions are precisely controlled: the lens outline is $171.22 \pm 0.2\text{mm}$, the TFT outline is $160.85 \pm 0.3\text{mm}$, and the total module thickness is $5.25 \pm 0.3\text{mm}$, enabling seamless integration into devices with space constraints.

The module also excels in environmental adaptability, supporting an operating temperature range of $-20 \sim +85$ and a storage temperature range of $-30 \sim +85$, along with RoHS compliance for environmental protection—meeting strict industry standards for safety and sustainability. Additionally, it uses an FH26-31S-0.3SHW compatible connector for stable data transmission, and its LED backlight operates at $V_F = 15 \pm 1.5\text{V}$ and $I_F = 80\text{mA}$, providing a luminance of 300cd/m^2 for consistent brightness across the screen. These features collectively make CH700WX09A-CTA a reliable choice for industrial controls, medical devices, and smart consumer electronics.



Features:

G+G Capacitive Touch Type for Durability & Sensitivity

The module adopts a G+G (Glass+Glass) structure for its capacitive touch panel (CTP), which uses two layers of glass—1.1mm-thick glass lens as the top layer and 0.55mm-thick glass sensor as the bottom layer. This design offers two key advantages: first, the 6H hardness of the glass lens provides strong scratch resistance, withstanding daily wear, frequent cleaning, or accidental contact with hard objects; second, the glass sensor enhances touch sensitivity, enabling quick and accurate responses to light touches or even operations with thin gloves. Additionally, the CTP is driven by the GT911 IC and operates at 3.3V I/O voltage, ensuring compatibility with common control systems.

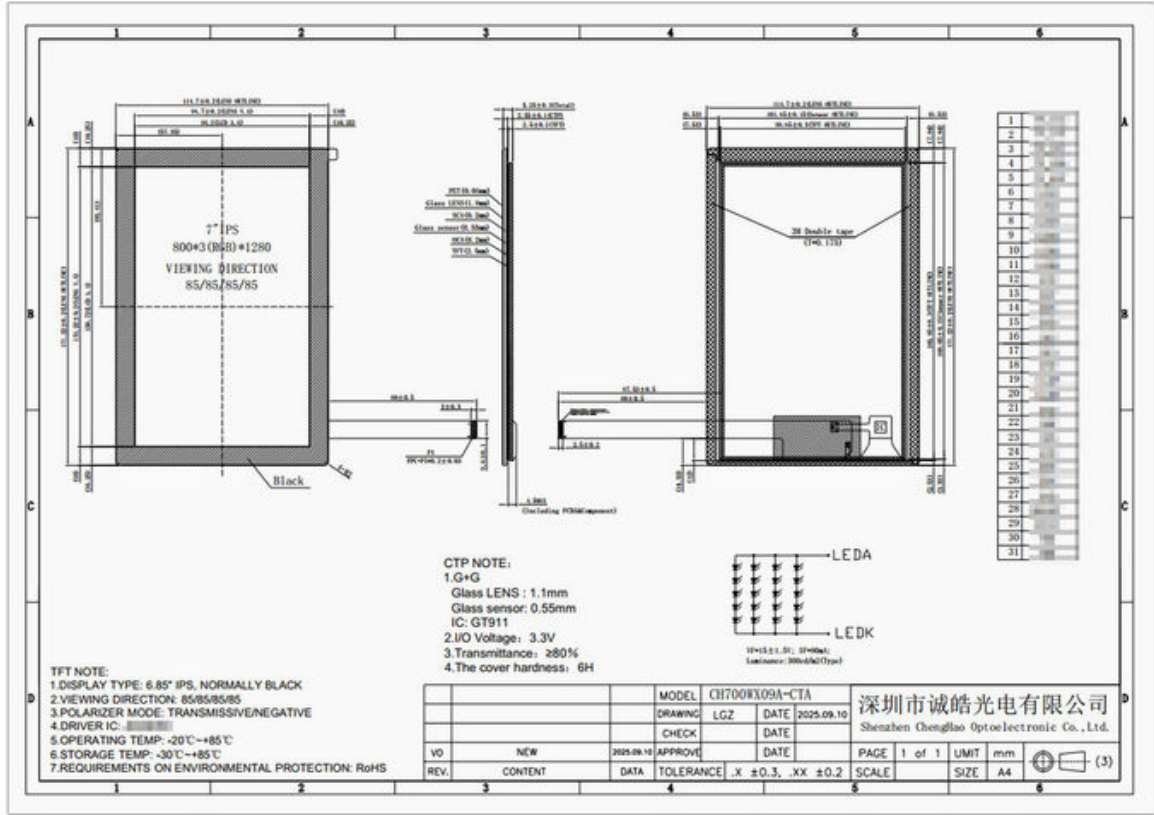
Reliable Connector Interface for Stable Data Transmission

For LCD data transmission, CH700WX09A-CTA uses the FH26-31S-0.3SHW compatible connector, a standard interface widely recognized in the display module industry. This connector features a compact design with precise pin spacing, ensuring a secure physical connection and minimizing signal loss during data transfer. It supports stable transmission of high-resolution image data and touch control signals, preventing issues like screen flickering or delayed touch responses caused by poor connectivity. The compatibility

of the connector also simplifies the module's integration into different devices, as it can match with most mainstream motherboards without requiring custom interface modifications.

Wide-Temperature Support for Harsh Environment Adaptability

The module is engineered to handle extreme temperature conditions, with an operating temperature range of -20 to +85 and a storage temperature range of -30 to +85 . This wide-temperature capability means it can maintain normal display performance and stable touch function in challenging environments—such as low-temperature outdoor settings (e.g., winter industrial workshops) or high-temperature indoor spaces (e.g., near heat-generating industrial equipment). Unlike modules with narrow temperature ranges that may experience pixel failure or touch unresponsiveness under extreme temperatures, CH700WX09A-CTA's robust temperature resistance expands its application scope to harsh industrial, automotive auxiliary, or outdoor smart device scenarios.



Technical Parameters:

Touch Interface	IIC
Contrast	800:1
Active Area	150.72x94.2 mm
Number of Dots	800x3(RGB)x1280
Module Type	7" TFT+CTP
Storage Temperature	-30 ~ +80
Brightness	300 Cd/m2
Viewing Area Size	151.22x94.7 mm
Operating Temperature	-20 ~ +70
LCD Interface	MIPI

Customization:

CH700WX09A-CTA, as a flexible 7-inch TFT LCD module, offers a range of customization options to align with diverse application requirements in industries like industrial control, medical equipment, and smart home. These customizations cover key components and functional parameters, ensuring the module integrates seamlessly into specific device designs.

First, in terms of structural customization, the FPC (Flexible Printed Circuit) design is highly adjustable. Customers can request modifications to the FPC's length, shape, and pin layout based on the internal space and connection needs of their target devices—for example, shortening the FPC to fit compact instrumentation or adjusting pin sequences to match unique motherboard interfaces . The glass lens also supports customization: beyond the standard 1.1mm thickness, thicker or thinner glass (e.g., 0.7mm for ultra-light devices) can be selected, and surface treatments like anti-glare (AG) or anti-fingerprint (AF) coatings are available to enhance usability in specific environments (e.g., AG coatings for outdoor-facing devices to reduce light reflection).

Second, optical performance customization caters to varied lighting conditions. The LED backlight luminance, which defaults to 300cd/m²,

can be adjusted—lowered to 150cd/m² for energy-saving indoor devices or increased to 500cd/m² for high-brightness needs in semi-outdoor settings . Additionally, the polarizer mode, while standard as transmissive/negative, can be tailored to transmissive/positive or reflective types if the module is intended for special scenarios like low-power outdoor equipment that relies on ambient light.

Third, touch function customization optimizes user interaction. The standard G+G CTP (Capacitive Touch Panel) can be replaced with a G+F (Glass+Film) structure for cost-sensitive applications, or enhanced with multi-touch support (up to 10-point touch) for devices requiring complex gestures like zooming or swiping . The touch sensitivity threshold is also adjustable—higher sensitivity for light-touch scenarios (e.g., medical devices operated with sterile gloves) or lower sensitivity to prevent accidental touches in industrial environments with vibration.

Finally, environmental adaptation customization extends the module's applicability. While the standard operating temperature range is -20 ~+85 , customers can opt for an extended range (-30 ~+90) with modified thermal management components for extreme industrial or automotive auxiliary use . Compliance with additional certifications (e.g., IP65 for dust and water resistance) is also available through structural sealing modifications, making the module suitable for harsh outdoor or wet environments like food processing facilities.

FAQ:

Q: What is the brand name of this TFT LCD Display?

A: The brand name of this TFT LCD Display is Chenghao Optoelectronic.

Q: What is the model number of this TFT LCD Display?

A: The model number of this TFT LCD Display is CH700WX09A-CTA.

Q: Where is this TFT LCD Display manufactured?

A: This TFT LCD Display is manufactured in China, specifically in Shenzhen.

Q: What certifications does this TFT LCD Display have?

A: This TFT LCD Display is certified with CE, ISO9001, Rose, and SGS certifications.

Q: What are the accepted payment terms for purchasing this TFT LCD Display?

A: The accepted payment terms for purchasing this TFT LCD Display are T/T, AliPay, and PayPal.



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