



## 40Pins Customized Lcd Display Module 5 Inch 800x480 Color Tft Screen

### Our Product Introduction

for more products please visit us on [chenghaolcd.com](http://chenghaolcd.com)

#### Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: CE, ISO9001, Rose, SGS
- Model Number: CH500WV05D-LA
- 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

- Viewing Direction: 80/80/80/80
- Color: 16M
- Contrast: 800:1
- Storage Temperature: -30 ~ +80
- Number Of Dots: 800x3(RGB)x480
- Module Size: 126.7x81.3x4.9 Mm
- Viewing Area Size: 107.7x64.5 Mm
- Interface: RGB
- Highlight: 5 inch TFT LCD display, 800x480 resolution LCD module, 40 pins customized LCD screen



#### More Images



Product Description

Product Description:

Shenzhen ChengHao Optoelectronic Co., Ltd.'s CH500WV05D-LA is a 5.0-inch TFT-LCD module engineered for **cross-scenario adaptability**, blending reliable performance with subtle design tweaks that cater to the unique needs of smart home, light industrial, and daily-use electronic devices. Unlike modules focused solely on industrial ruggedness, this product balances durability with user-centric visual and structural details, making it a versatile choice for both professional and consumer-facing applications.



At its core, the IPS panel with 800×480 resolution (800×RGB×480 dot arrangement) and 16M color support excels at rendering diverse content types: it displays smart home control interfaces (e.g., lighting dimming sliders, HVAC temperature gauges) with smooth color transitions, and presents light industrial data (e.g., small-scale workshop production counts, equipment running status) with clear text and sharp icons. The 80/80/80/80 all-around viewing angles eliminate the frustration of “one-person-only” viewing—for example, in a family setting, multiple members can check the smart door lock’s visitor log on the module simultaneously; in a small workshop, two operators can verify equipment parameters without crowding around the screen.

Structurally, the module’s layered design prioritizes both protection and practicality. The 2.0mm Gorilla Glass 3 cover resists not just industrial scratches but also daily wear, such as fingerprints from frequent touch in smart home use or minor impacts from kitchen utensils near a smart refrigerator display. The 0.2mm OCA layer is calibrated to minimize light reflection, ensuring the screen remains readable even under harsh, direct light (e.g., sunlight streaming through a kitchen window or overhead lamps in a small workshop). A 0.05mm protective film, often overlooked in standard descriptions, adds value during logistics and assembly—it shields the glass from dust during transportation and prevents accidental scratches while integrating the module into device casings. With an overall thickness of 4.9mm±0.2mm, the module fits into slim device frames, from 5-inch smart home control panels to compact portable meters.

Environmentally, the module goes beyond basic compliance to meet daily-use demands: its -20°C~+70°C operating temperature range adapts to seasonal fluctuations (e.g., cold winter balconies for smart thermostats, warm summer kitchens for smart appliances) without display glitches. RoHS compliance ensures it is safe for use in food-related smart devices (e.g., smart pantry monitors) where hazardous substance restrictions are critical. The backlight system, delivering 450 cd/m² typical luminance at Vf=18±1.2V and If=60mA, balances brightness and energy efficiency—bright enough to cut through kitchen steam-induced glare, yet low-power enough to avoid draining batteries in portable smart detectors.



In short, the CH500WV05D-LA stands out not just for its solid specs, but for how it translates those specs into real-world usability—catering to both the durability needs of light industrial use and the visual comfort required for smart home interactions.

Features:

1.High Resolution: The CH500WV05D-LA features a resolution of 800x480 pixels, which ensures sharp and clear image quality. This level of resolution is particularly beneficial for applications that require detailed visuals, such as industrial control systems and medical devices. The clarity provided by this resolution enhances user interaction and allows for effective data presentation, making it suitable for various environments.



fluctuations may occur.

**Medical Equipment:** In the medical field, the CH500WV05D-LA display module is integrated into devices such as patient monitors and diagnostic equipment. The clear display allows healthcare professionals to view vital signs and other critical data accurately. For example, it can be used in a heart rate monitor, where the display shows real-time heart rate data, helping medical staff respond promptly to patient needs. The module's robustness and reliability in varying temperatures make it ideal for use in hospitals and clinics.

**Instrumentation:** The CH500WV05D-LA is suitable for instrumentation applications, such as in laboratory equipment and analytical devices. Its high brightness of 450 cd/m<sup>2</sup> ensures that data can be read easily in different lighting conditions, which is crucial in laboratory environments where lighting may vary. The display can be used to show graphs, measurements, and other data, facilitating better analysis and interpretation by researchers and technicians.

**Vehicle-Mounted Applications:** In automotive applications, the CH500WV05D-LA is used in dashboard displays and infotainment systems. The module's ability to withstand a wide operating temperature range makes it suitable for installation in vehicles, where temperatures can fluctuate significantly. It provides drivers with essential information, such as navigation data and vehicle status, in a clear and accessible format, enhancing the overall driving experience.

In conclusion, the CH500WV05D-LA display module is a highly adaptable solution that meets the demands of various industries, providing clarity and reliability in applications ranging from industrial control to smart home devices and medical equipment.

## Support and Services:

At Chenghao Optoelectronic, we are committed to providing exceptional support and services for our CH500WV05D-LA display module to ensure customer satisfaction and seamless integration into various applications. Our comprehensive service offerings include the following:

- (1). **Technical Support:** Our dedicated technical support team is available to assist customers with any inquiries or challenges they may encounter during the installation and operation of the CH500WV05D-LA. Whether it's a question about the LCD interface or troubleshooting display issues, our experts are ready to provide timely and effective solutions.
- (2). **Customization Assistance:** Understanding that each application may have unique requirements, we offer customization services for the CH500WV05D-LA. Our team works closely with customers to modify aspects such as FPC design, backlight brightness, and operating temperature ranges to meet specific project needs. This collaborative approach ensures that the final product aligns perfectly with customer expectations.
- (3). **Quality Assurance:** We take pride in the quality of our products. Each CH500WV05D-LA module undergoes rigorous quality control processes before shipment. This includes thorough testing to ensure that the display meets our high standards for performance and reliability. Customers can trust that they are receiving a product that has been carefully inspected and validated.
- (4). **After-Sales Service:** Our commitment to customer satisfaction extends beyond the initial purchase. We provide a one-year warranty on the CH500WV05D-LA, ensuring that any defects or issues arising within this period are addressed promptly. If a product problem occurs, customers can expect a replacement within 30 days of delivery, minimizing any disruptions to their operations.
- (5). **Documentation and Resources:** To facilitate the integration of the CH500WV05D-LA into customer projects, we provide comprehensive documentation, including datasheets, installation guides, and customization options. This information is readily available to help customers make informed decisions and streamline the implementation process.

In summary, Chenghao Optoelectronic is dedicated to supporting our customers throughout the lifecycle of the CH500WV05D-LA display module. From technical assistance and customization to quality assurance and after-sales support, we strive to ensure that our customers have a positive experience and achieve their project goals.

## 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 CH500WV05D-LA.

**Q: Where is this TFT LCD Display manufactured?**

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

**Q: What certifications does this TFT LCD Display have?**

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

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

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



**Shenzhen ChengHao Optoelectronic Co., Ltd.**



+86 755-27806536



add@chenghaolcm.com



chenghaolcd.com

7th floor, building C5, Hengfeng Industrial City, Hangcheng street, Bao'an District, Shenzhen