Customized Display 4 Inch 480x800 IPS Lcd Display Screens With MIPI Interface

Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: RoHS CE、FCC
- Model Number: CH400WV22C-CTB
- 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: TT
- Supply Ability: 300K Pcs/month

Product Specification

- Color: 16M
- Touch Type: Capacitive Touch
- Viewing Direction: 85/85/85/85
- Screen Brightness: 600 Cd/m2
- Resolution: 480*800 Dots
- FPC Pin Numbers: 25
- Module Size: 61*102*3.65 Mm
- Storage Temperature: -30 ~ +80

More Images

Product Description

Product Description:

The CH400WV22C-CTB is a premium 3.97-inch IPS TFT LCD module engineered by Chenghao Optoelectronic for applications demanding high visual clarity, robust performance, and design adaptability. With a native resolution of 480 × 800 pixels and support for 16 million colors, it renders sharp, vibrant images with excellent color consistency across its wide viewing angles—85° in all directions— thanks to its advanced in-plane switching (IPS) technology. The display operates in a transmissive, normally black mode and delivers a brightness of 600 cd/m² with a contrast ratio of 800:1, ensuring legibility even in brightly lit environments.

		Housed in a compact 61 × 102 × 3.65 mm package, the module features a 25-pin FPC and utilizes a MIPI interface, enabling high-speed data transmission with minimal signal noise—ideal for systems requiring responsive and stable visual output. Integrated capacitive touch functionality provides intuitive user interaction, though the design allows for easy adaptation to resistive or non-touch configurations based on project needs.
		Built for reliability, the CH400WV22C-CTB supports an operating temperature range of –20°C to +70°C and can be further customized for extended thermal performance down to –45°C or up to +90°C. Its active area measures 51.84 × 86.4 mm, maximizing usable screen space while maintaining mechanical precision. As part of Chenghao's flexible manufacturing approach, the module also supports tailored options such as backlight intensity adjustment, EMI shielding, anti-glare treatment, and custom FPC layouts—making it a versatile solution for industrial control panels, instrumentation displays, and other specialized visual interfaces where durability and image quality are paramount

Features:

MIPI Interface for Optimal Performance
The CH400WV22C-CTB uses a MIPI (Mobile Industry Processor Interface) for its connection, which is recognized for its high-speed data transfer capabilities. This interface allows for efficient communication between the display and host controllers, enabling fast refresh rates and fluid graphics. The adoption of the MIPI protocol is vital for applications that require responsive and real-time performance, making it suitable for various industrial settings where speed and reliability are paramount.

Wide Viewing Angles
Featuring an impressive viewing angle of 85 degrees from all directions, the CH400WV22C-CTB ensures that the display maintains color consistency and clarity, regardless of the viewer's position. This characteristic is essential in environments where multiple users may interact simultaneously with the display. It allows for flexibility in installation and user engagement, enhancing overall usability without the need for specific alignment.

Robust Operating Temperature Range
This module is designed to function effectively within a temperature range of -20°C to +70°C. Such wide tolerance makes it suitable for various applications that may encounter varying environmental conditions. Its ability to perform reliably in both cold and warm environments ensures that end-users can depend on the device without concerns about performance degradation due to temperature fluctuations.
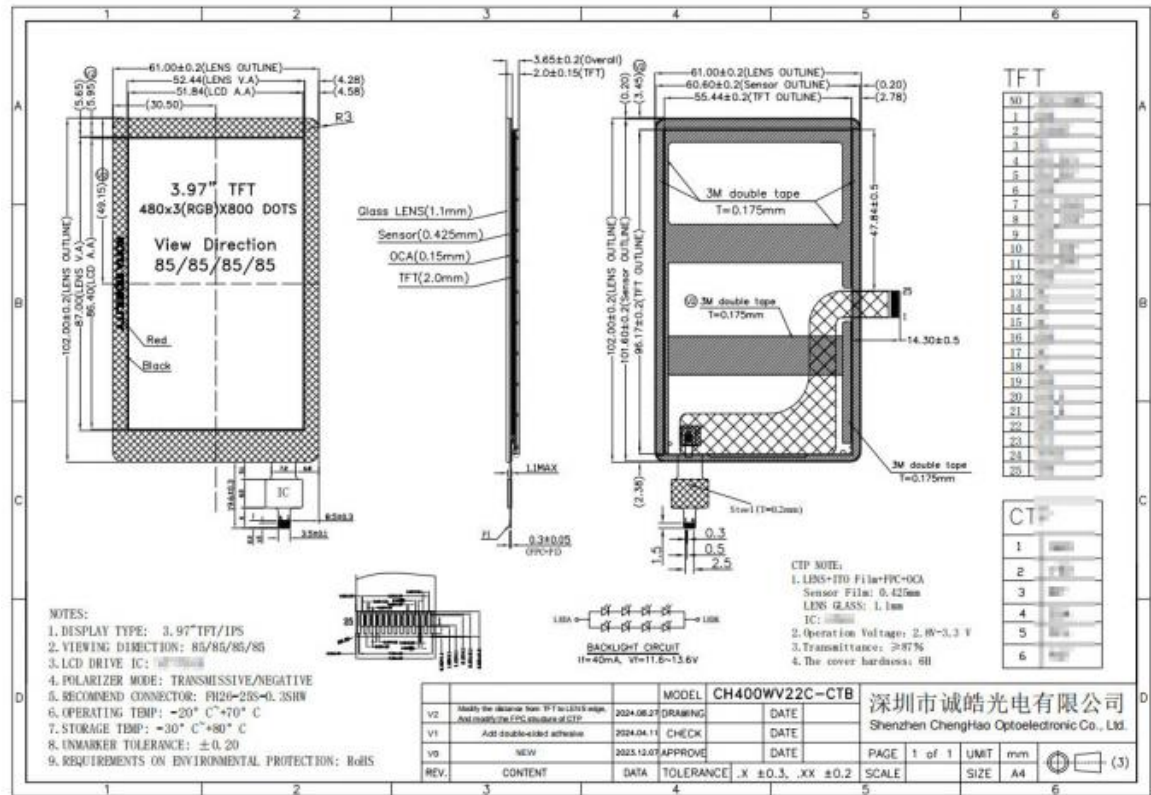
Customizable Environmental Conditions
The CH400WV22C-CTB is capable of operating in a wide range of conditions, with opportunities for further customization. For specific

applications needing enhanced performance, clients can request variations that allow for a broader temperature range. This adaptability to extreme environments supports industries where equipment must withstand challenging conditions, ensuring continuity of operation without compromising reliability.

Technical Parameters:

Screen Brightness	600 Cd/m²
Storage Temperature	-30 ~ +80
Viewing Direction	85/85/85/85
Color	16M
Resolution	480*800 Dots
Viewing Area Size	52.44*87 mm
LCD Interface	MIPI
Screen Size	3.97 Inch
Operating Temperature	-20 ~ +70
Touch Type	Capacitive Touch

Support and Services:

Chenghao Optoelectronics provides comprehensive technical support and value-added services throughout the entire product lifecycle for the CH400WV22C-CTB LCD module, ensuring smooth integration and long-term stable operation in professional applications. From initial consultation to post-delivery deployment, customers receive dedicated engineering technical support.

To accelerate development, Chenghao provides reference design documents and detailed mechanical drawings, covering key information such as flexible printed circuit board (FPC) layout, mounting hole positions, and no-go zones. For projects requiring adjustments, the company's R&D team collaborates closely with customers to assess the feasibility of modifications such as backlight brightness adjustment, touch sensor recalibration, or wide-temperature performance certification, and provides rapid prototyping support.

In addition to customization capabilities, Chenghao ensures product consistency through rigorous incoming material inspection, in-process testing, and final inspection simulating real-world operating conditions. Strategic component management and lifecycle monitoring ensure long-term uninterrupted supply for industrial projects, reducing the risks associated with component downtime. Furthermore, the company provides multilingual technical documentation, efficient after-sales troubleshooting, and on-site technical support when necessary, demonstrating its commitment to being a partner beyond simply supplying components.

FAQ:

Q1: What is the model number of the Small LCD Touch Screen from Chenghao Optoelectronic?

A1: The model number is CH400WV22C-CTB.

Q2: What certifications does this product have?

A2: The Small LCD Touch Screen is certified with RoHS, CE, and FCC.

Q3: What is the minimum order quantity for this product?

A3: The minimum order quantity is 100 pieces.

Q4: How is the product packaged to ensure safety during shipping?

A4: All products are packed properly to keep them safe. For small sizes, we use tray plus carton packaging. For bigger sizes, foam slot plus carton is used. We also design packages according to customers' requirements.

Q5: What is the typical delivery time for orders of this product?

A5: The delivery time is typically between 3 to 7 days.

Q6: What are the payment terms available?

A6: Payment is accepted via TT (telegraphic transfer).

Q7: What is the supply capacity of Chenghao Optoelectronic for this product?

A7: Chenghao Optoelectronic can supply up to 300,000 pieces per month.