

# 4 Inch Medical Lcd Display All in black 480x480 with MIPI Interface

### **Basic Information**

Brand Name: Chenghao Optoelectronic

100 Pcs

• Certification: RoHS CE FCC

Model Number: CH400WV23A-CTBA

Minimum Order

Quantity:

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**

• Module Size: 96 \* 96 \* 4.04 Mm

• Operating Temperature: -20 ~ +70 °C

Display Mode: IPS/Transmissive/Normally Black

• Storage Temperature: -30 ~ +80 °C

Lcd Interface: MIPITouch Interface: IIC

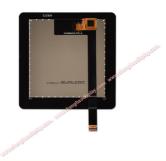
• Viewing Direction: 80/80/80/80

• Visible Area Size: 72.06 \* 70.38 Mm

• Highlight: 4 Inch Medical Lcd Display,

Medical Lcd Display All in Black, 480x480 Medical Lcd Display





## More Images





## **Product Description**

#### **Product Description:**

The CH400WV23A-CTBA is a cutting-edge 4-inch TFT LCD touch screen module designed to deliver exceptional performance and versatility across a wide range of applications. With its compact dimensions of 96 x 96 x 4.04 mm, this module is ideal for integration into devices where space is at a premium. The display features a resolution of 480 x 480 pixels, ensuring that images and text appear sharp and vibrant, making it suitable for both industrial and consumer electronics.



One of the standout features of the CH400WV23A-CTBA is its use of IPS (In-Plane Switching) technology, which provides wide viewing angles of 80 degrees in all directions. This ensures that users can view the display clearly from various positions without experiencing significant color distortion. The module also incorporates a capacitive touch panel, allowing for smooth and responsive interaction, which is essential for modern user interfaces.

The touch glass cover of the CH400WV23A-CTBA is designed with an All in Black effect, enhancing the aesthetic appeal of the module while minimizing reflections. This design choice not only contributes to a sleek and modern look but also improves the overall user experience by reducing distractions during operation. The glass cover has a hardness rating of 6H, providing excellent durability and resistance to scratches, which is particularly important in environments where the display may be subject to wear and tear.

In terms of brightness, the CH400WV23A-CTBA boasts a brightness level of 600 cd/m², making it suitable for use in various lighting conditions, including bright outdoor environments. This high brightness ensures that the display remains visible and clear, enhancing user interaction and satisfaction.

The module operates effectively within a temperature range of -20 to +70 degrees Celsius, ensuring reliable performance in diverse environmental conditions. This wide operating temperature range makes it an excellent choice for applications in industrial control, smart home devices, medical equipment, and automotive displays.

Chenghao Optoelectronic, the manufacturer of the CH400WV23A-CTBA, is committed to quality and innovation. The company adheres to strict quality management standards, ensuring that each module meets high performance and reliability benchmarks. Furthermore, customization options are available, allowing clients to tailor the module to meet specific project requirements, including adjustments to the FPC structure and backlight brightness.



In summary, the CH400WV23A-CTBA is a versatile and high-performance display solution that meets the diverse needs of various industries, providing users with a reliable and engaging visual experience

#### Features:

All in Black Touch Glass Cover: The CH400WV23A-CTBA features a sleek All in Black touch glass cover, which enhances the module's aesthetic appeal while providing a modern look. This design is particularly suitable for consumer electronics such as smart home devices and personal gadgets, where visual design plays a crucial role in user engagement. The minimal reflections from the glass improve visibility, making it ideal for interactive displays in retail environments.

**High Resolution (480 x 480 pixels)**: With a resolution of 480 x 480 pixels, this module delivers crisp and clear images. This feature is essential for **medical equipment** and **industrial control systems**, where precise visual feedback is necessary for monitoring and diagnostics. The clarity of the display ensures that critical information is easily readable, enhancing the effectiveness of these applications.

**IPS Technology for Wide Viewing Angles**: The use of IPS (In-Plane Switching) technology allows for wide viewing angles of 80 degrees in all directions. This characteristic is particularly advantageous in **automotive applications**, such as dashboards and

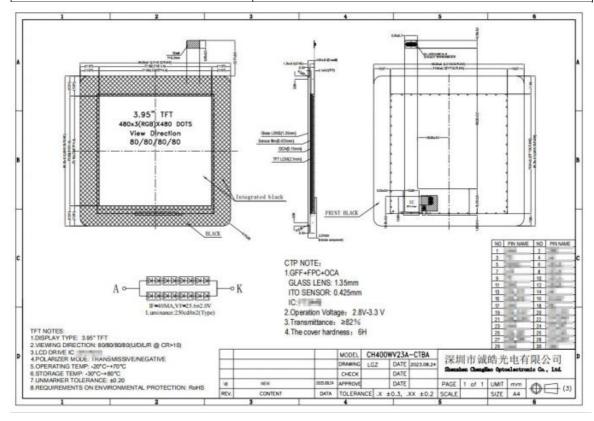
infotainment systems, where multiple passengers may need to view the display from different angles. It ensures consistent color and brightness, improving the overall user experience.

Capacitive Touch Panel: The capacitive touch panel provides a responsive and intuitive user interface, making it suitable for smart home control panels and kiosks. Users can interact with the display effortlessly, enhancing the usability of devices that require frequent user input. This feature is crucial in environments where quick and accurate touch response is necessary, such as in point-of-sale systems.

Operating Temperature Range (-20 to +70 degrees Celsius): The CH400WV23A-CTBA operates effectively in a wide temperature range, making it suitable for outdoor applications and industrial environments. Whether used in rugged machinery or outdoor kiosks, this feature ensures that the display remains functional and reliable under varying climatic conditions, providing consistent performance regardless of the environment.

#### **Technical Parameters:**

Display Mode	IPS/Transmissive/Normally Black
Storage Temperature	-30 ~ +80 °C
Module Size	96 * 96 * 4.04 mm
Operating Temperature	-20 ~ +70 °C
Number of dots	480x480
Lcd Interface	MIPI
Active area size	71.86 * 70.18 mm
Touch Type	Capacitive
Visible area size	72.06 * 70.38 mm
Touch Interface	IIC



### **Customization:**

The CH400WV23A-CTBA display module offers a comprehensive range of customization options, allowing clients to tailor the product to meet specific application needs. This flexibility is essential for businesses looking to integrate the module into various devices and

One of the primary customization options is the **FPC** (**Flexible Printed Circuit**) **design**. Clients can request modifications to the FPC layout and structure, enabling the module to fit seamlessly into their devices. This is particularly useful for applications where space constraints or specific connection requirements exist, ensuring that the display integrates smoothly into the overall design of the product. Another significant aspect of customization is the **backlight brightness adjustment**. While the standard brightness of the CH400WV23A-CTBA is 600 cd/m², clients can specify different brightness levels based on their operational environment. For instance, applications in bright outdoor settings may require higher brightness to ensure visibility, while indoor applications might benefit from lower brightness settings to reduce glare.

The **LCD interface** can also be customized according to client specifications. The standard module supports a MIPI interface, but alternative interfaces such as SPI, RGB, or LVDS can be implemented based on the client's existing systems. This adaptability allows for seamless integration into a wide range of devices, from industrial control systems to consumer electronics.

In addition to these technical modifications, clients can choose between different touch technologies. The CH400WV23A-CTBA typically features a capacitive touch panel, but for applications that require different interaction methods, such as in environments where users may be wearing gloves, a resistive touch solution can be provided. This ensures that the module meets the specific interaction needs of various applications.

Furthermore, clients have the option to customize the appearance of the touch glass cover. This includes selecting the thickness, finish, and even the incorporation of branding elements, allowing for a cohesive product identity that aligns with the client's brand image. The All in Black effect of the touch glass can also be tailored to enhance the visual appeal of the final product.

Chenghao Optoelectronic is dedicated to providing technical support throughout the customization process. Their team of experts is available to assist clients in achieving their desired specifications, ensuring that the final product not only meets but exceeds expectations.

#### Packing and Shipping:

When it comes to packing and shipping the CH400WV23A-CTBA display module, Chenghao Optoelectronic prioritizes the protection and safety of the product throughout the transportation process. The packaging process is designed to ensure that the display modules arrive at their destination in perfect condition, ready for installation and use.

- 1. Packaging Materials: All shipping boxes used for the CH400WV23A-CTBA meet export hardness standards, ensuring they are robust enough to withstand the rigors of transportation. Inside each box, foam padding is utilized to provide additional cushioning, preventing any potential damage to the display during transit. This dual-layer protection is crucial, especially for sensitive electronic components like LCD
- 2. Box Configuration: The packaging adopts a strategy of using larger boxes that contain smaller boxes, which helps to organize the modules effectively and minimize movement during shipping. This method not only optimizes space but also enhances the overall safety
- 3. Weight and Dimensions: Each box is designed to not exceed a weight of 3.5 kilograms, making it manageable for handling and shipping. The dimensions of the boxes may vary based on the specific order requirements, but they are always designed to ensure maximum protection for the contents.
- 4. Use of Pallets or Wooden Frames: For larger orders, Chenghao Optoelectronic employs pallets or wooden frames to secure the goods. This approach provides stability and makes it easier to transport multiple units at once, reducing the risk of damage during loading and unloading.
- 5. Custom Packaging Options: In addition to standard packaging, Chenghao Optoelectronic offers customization options for packaging based on customer requirements. If clients have specific needs regarding packaging design or materials, the company is willing to accommodate these requests to ensure customer satisfaction.
- 6. Shipping Methods: Chenghao Optoelectronic collaborates with reliable shipping partners to ensure timely and safe delivery of the CH400WV23A-CTBA modules. Various shipping methods are available, allowing clients to choose the option that best suits their timeline
- 7. Quality Assurance: Before shipping, each module undergoes a quality check to ensure that it meets the company's high standards. This step is critical in maintaining the integrity and performance of the display modules upon arrival.

In conclusion, the packing and shipping process for the CH400WV23A-CTBA is meticulously designed to protect the product and ensure it reaches customers in optimal condition. With a focus on quality and customer satisfaction, Chenghao Optoelectronic strives to provide a seamless experience from production to delivery

#### FAQ:

- Q: What is the brand name of this small LCD touch screen?
- A: The brand name is Chenghao Optoelectronic.
- Q: What is the model number of this small LCD touch screen?
- A: The model number is CH400WV23A-CTBA.
- Q: What certifications does this small LCD touch screen have?
- A: This product is certified with RoHS, CE, and FCC.
- Q: What is the minimum order quantity for this small LCD touch screen?
- A: The minimum order quantity is 100 pieces.
- Q: What are the packaging details for this small LCD touch screen?

A: All the products are packed in the right way to keep them safe. For small sizes, we use tray + carton, and for bigger sizes, we use foam slot + carton. We also design packages according to customers' requirements.



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