# 480x272 Resolution 4.3 Inch LCD Display Module TFT Capacitive Touchscreen Normally Black Display Mode High Temperature Range

#### **Basic Information**

• Place of Origin: China Shenzhen

Brand Name: Chenghao Optoelectronic

• Certification: RoHS CE、FCC

Model Number: CH430WQ12A1-CT

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**

• Product Name: 4.3 Inch LCD Display Module

Display Mode:
 IPS /transmissive/ Normally Black

• Touch Panel Interface: Touch Panel Interface

• Storage Temperature: -30 ~ +80

• Resolution: 480 X 272 Dots

• Touch Panel Type: Capacitive

• Viewing Direction: 80/80/80/80

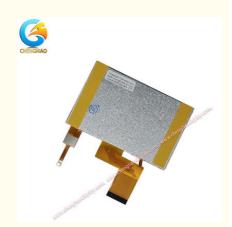
• Color: 16M

• LCD Interface: 24-bit Parallel RGB Interface

• Highlight: 4.3 Inch LCD Display Module,

480x272 LCD Display Module,

High Temperature Range LCD Display Module



## More Images







### **Product Description**

#### **Product Description:**

The CH430WQ12A1-CT is a 4.3-inch IPS TFT LCD module developed, manufactured, and sold by Chenghao Optoelectronic, designed to meet the needs of various industry applications. This module adopts IPS technology with a transmissive/normally black display mode, a resolution of 480x272 pixels, and supports 16M colors, ensuring clear images and vibrant colors. It offers 80/80/80/80 viewing angles for multi-angle viewing, and a brightness of 300 cd/m², making it ideal for use in indoor environments.



The CH430WQ12A1-CT has dimensions of 105.5\*67.2\*4.95 mm, a display area of 96.0454.86 mm, and an active area of 95.04\*53.86 mm. The module consists of a TFT LCD panel, a capacitive touch panel, a driver IC, a backlight, and an FPC. It supports a 24-bit parallel RGB interface and an I2C touch panel interface. Its operating temperature range is -20 to +70, and its storage temperature range is -30 to +80, ensuring reliable performance in harsh environments.

This module is widely used in industrial control, smart home, medical equipment, instrumentation, artificial intelligence, IoT devices, and vehicle-mounted applications. Chenghao Optoelectronic also offers customization services, allowing adjustments to backlight brightness, modifications to the shape and structure of the FPC, defining the LCD interface, or designing a customized touch panel to meet the specific requirements of different projects.



#### **Features:**

**Compact Size:** The module measures 105.5 \* 67.2 \* 4.95 mm, making it suitable for applications with space constraints. **High Color Depth:** It supports 16 million colors, providing rich and vibrant visuals for enhanced user experience.

Wide Operating Temperature Range: The module operates effectively in temperatures ranging from -20 to +70 , ensuring

reliability in various environmental conditions.

Capacitive Touch Technology: The integrated capacitive touch panel allows for responsive and intuitive user interaction.

**IPS Technology:** The use of IPS (In-Plane Switching) technology ensures wide viewing angles and consistent color reproduction, enhancing the overall display quality.

**Customizable Options:** The module can be customized according to specific project requirements, including adjustments to the backlight brightness and modifications to the FPC structure.

**Versatile Applications:** Ideal for use in various industries such as industrial control, smart home devices, medical equipment, and IoT applications, showcasing its adaptability.

#### **Technical Parameters:**

Touch Panel Type Capacitive

Touch Panel Interface Touch Panel Interface

Storage Temperature  $-30 \sim +80$ 

Brightness 300 Cd/m2

Display Mode IPS /transmissive/ Normally

Black

Resolution 480 X 272 Dots

Operating Temperature

-20 ~ +70

Color

16M

Viewing Direction

80/80/80/80

LCD Interface

24-bit Parallel RGB Interface

#### **Applications:**

# The CH430WQ12A1-CT is a versatile 4.3-inch IPS TFT LCD module that finds extensive applications across various industries, catering to diverse needs.

**Industrial Control:** This module can be utilized in industrial control systems, providing real-time data monitoring and operational interfaces, which help users manage and control production processes effectively.

**Medical Equipment:** In the healthcare sector, the **CH430WQ12A1-CT** can be integrated into devices such as heart rate monitors and thermometers, offering a clear display interface that ensures medical personnel can quickly access critical information.

**Smart Home Devices:** The module is suitable for smart home applications, such as smart refrigerators and coffee machines, providing an intuitive user interface that enhances the overall user experience.

Internet of Things (IoT) Devices: In IoT applications, the CH430WQ12A1-CT can serve as a data display screen, connecting sensors and controllers to show real-time environmental data and device status.

**Vehicle-Mounted Equipment:** This module is ideal for use in vehicle control systems, navigation devices, and dash cameras, delivering high brightness and wide viewing angles to ensure driving safety.

**Instrumentation:** In various instruments and meters, the **CH430WQ12A1-CT** can be employed to display measurement results and operational interfaces, assisting users in precise instrument operation.

**Artificial Intelligence Devices:** The module can also be applied in intelligent robots and Al devices, providing a human-machine interaction interface that enhances the level of device intelligence.

**Payment and Financial Devices:** In payment terminals such as POS machines and ATMs, the **CH430WQ12A1-CT** can present clear transaction information and user operation interfaces, ensuring smooth transaction processes.

Through these application areas, it is evident that the **CH430WQ12A1-CT** module's flexibility and adaptability make it an ideal display solution across multiple industries.

#### **Support and Services:**

At Chenghao Optoelectronic, we prioritize customer satisfaction and provide comprehensive support and services for our CH430WQ12A1-CT module. Our commitment to quality and reliability extends beyond the sale of our products, ensuring that customers receive the assistance they need throughout their experience with us.

**Technical Assistance**: Our dedicated technical support team is available to assist customers with any inquiries related to the CH430WQ12A1-CT. Whether you need help with installation, configuration, or troubleshooting, our experts are just a call or email away. We aim to provide timely and effective solutions to enhance your experience with our products.

**Customization Support**: Understanding that each application may have unique requirements, we offer customization services for the CH430WQ12A1-CT. Our team collaborates closely with customers to modify aspects such as the FPC design, backlight brightness, and interface types. This flexibility allows us to tailor the module to fit specific project needs, ensuring optimal performance in various environments.

Warranty and Quality Assurance: We stand behind the quality of our products with a standard warranty period of 12 months. This warranty covers defects in materials and workmanship, providing peace of mind to our customers. Our manufacturing processes adhere to strict ISO9001 quality management and ISO14001 environmental management standards, ensuring that every CH430WQ12A1-CT module meets high-quality benchmarks before it reaches the customer. Sample Availability: For potential customers looking to evaluate the CH430WQ12A1-CT before committing to a larger order, we offer sample units. This allows you to assess the product's features and compatibility with your application, making informed decisions easier.

**Order and Delivery Support** Our sales team is equipped to assist you with the ordering process, ensuring that you receive the correct quantity and specifications for your needs. We understand the importance of timely delivery and work diligently to fulfill orders efficiently, keeping you informed throughout the process.

**Post-Sales Service**: After the purchase, our commitment to customer service continues. Should you encounter any issues with the CH430WQ12A1-CT, our support team is ready to help resolve any concerns. We value your feedback and strive to improve our services based on customer experiences .

In summary, Chenghao Optoelectronic is dedicated to providing exceptional support and services for the CH430WQ12A1-CT. From technical assistance and customization options to warranty coverage and post-sales support, we ensure that our customers have a positive experience with our products, fostering long-term partnerships built on trust and satisfaction.



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