



4.3-inch Industrial-grade TFT LCD Display Module 800×480 Resolution 80-degree Viewing Angle

Our Product Introduction

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Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: CE、RoHS、FCC
- Model Number: CH430WQ22A-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 Or Others
- Supply Ability: 50000000 Pcs/month



Product Specification

- Screen Size: 4.3 Inch
- FPC Pin Numbers: 24
- Touch Interface: IIC
- Touch Type: Capacitive Touch
- Lcd Type: 5.0" TFT
- Lcd Interface: SPI
- Color: 16M
- Resolution: 800x480 Dots
- Highlight: 4.3-inch industrial TFT LCD module, 800x480 resolution LCD display, 80-degree viewing angle TFT module




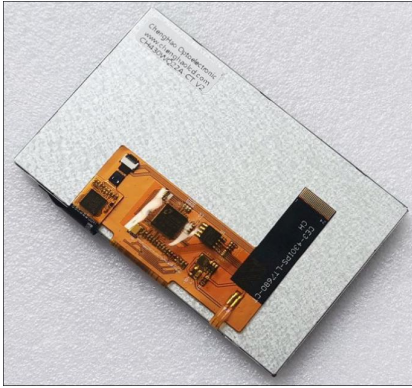
More Images





Product Description

Product Description:

<p>The CH430WQ22A-CT is a high-performance 4.3-inch landscape TFT LCD display module integrated with capacitive touch functionality, engineered for industrial and professional applications. Boasting a crisp 800x480 resolution, it delivers vivid 16M-color visuals with an 800:1 contrast ratio and 800 cd/m² high brightness (supports 300~1500 cd/m² customization). Adopting IPS transmissive normally black technology, it offers 80/80/80/80 all-angle viewing, ensuring clear visibility from any orientation.</p>	
	<p>The module features a 24-pin FPC interface, supporting SPI as standard with customizable options including MCU, RGB, LVDS, and HDMI. Its compact dimensions (105.56x72.475 mm) with an active area of 95.04*53.86 mm make it ideal for space-constrained devices. Equipped with IIC interface capacitive touch (resistive or non-touch optional), it operates stably in -20~+70 temperature range, with storage temperature reaching -30~+80 , suitable for harsh industrial environments.</p>

Features:

Ultra-Wide Viewing Angle IPS Panel

The IPS transmissive normally black display provides uniform 80° viewing in all four directions, eliminating color distortion and ensuring consistent visibility for collaborative industrial operations.

High Brightness & Customizable Luminance

With 800 cd/m² standard brightness and 300~1500 cd/m² customization range, the module maintains clear readability even under strong ambient light, ideal for outdoor or high-glare industrial sites.

Flexible Interface Compatibility

Supports SPI as default, with expandable options including MCU, RGB, LVDS, and HDMI. The 24-pin FPC design ensures stable signal transmission for diverse industrial control systems.

Broad Temperature Tolerance

Operating temperature from -20 to 70 and storage temperature from -30 to 80 enables reliable performance in extreme environments such as outdoor monitoring and industrial automation equipment.

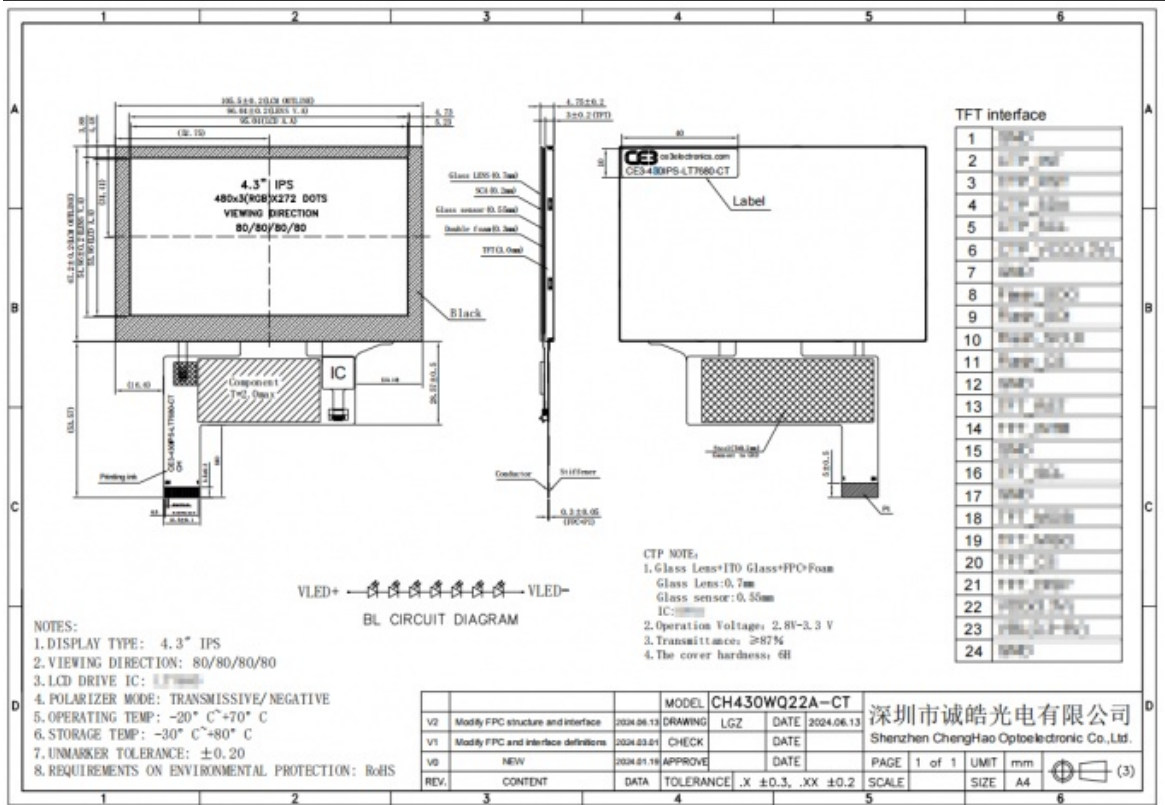
Dual Touch Options with Precise Response

Capacitive touch (IIC interface) as standard, with resistive touch or non-touch alternatives available, catering to different operational needs like glove-touch scenarios in factories.

Technical Parameters:

Module Type	4.3" TFT+CTP
Screen Size	4.3 Inch

Screen Brightness	800 Cd/m ²
Contrast	800
Display Mode	IPS/Transmissive/Normally Black
Lcd Interface	SPI
Touch Interface	IIC
Color	16M
FPC Pin numbers	24
Storage Temperature	-30 ~ +80



Customization:

As a tailor-made industrial display module, the CH430WQ22A-CT offers comprehensive customization services to meet diverse customer requirements, with the following key options:

First, FPC Customization: We support personalized design of FPC shape, structure, and pin count, adapting to the specific installation space and connection needs of your devices.

Second, Interface Customization: Beyond the standard SPI interface, we provide one-stop customization of multiple interfaces including MCU, RGB, MIPI, LVDS, EDP, and HDMI, ensuring seamless integration with your control systems.

Third, Backlight Brightness Tuning: The default 800 cd/m² brightness can be adjusted within 300~1500 cd/m², and select models can reach up to 2800 cd/m² for ultra-high brightness scenarios.

Fourth, Temperature Range Expansion: We offer customized operating temperature ranges from -10~+60 to -45~+90 , enabling the module to withstand extreme cold or heat in special industrial environments.

Fifth, Glass Cover Personalization: Customize glass cover shape, thickness, opening positions, and silk screen printing according to your device's structural and branding needs.

Sixth, Touch Solution Selection: Choose between capacitive touch, resistive touch, or non-touch versions based on your application scenarios.

Additionally, we provide anti-glare coating and anti-electromagnetic interference (EMI) treatment to enhance the module's adaptability to harsh working conditions.

Support and Services:

Chenghao Optoelectronic is committed to providing end-to-end support and services for the CH430WQ22A-CT display module, ensuring a smooth integration experience for our customers.

First, Technical Consultation: Our professional engineering team offers free pre-sales consultation, including module selection guidance, interface compatibility analysis, and customization solution design, to help you optimize product matching.

Second, Sample Provision: We provide free or low-cost samples for testing, allowing you to verify the module's performance, compatibility, and durability in your actual devices before mass orders.

Third, Customization Support: We assign dedicated project managers to follow up on your customization requests, from design drawing confirmation to prototype production and testing, ensuring all customized parameters meet your specifications.

Fourth, Quality Assurance: All modules undergo strict aging tests, temperature cycle tests, and reliability tests before delivery. We provide a comprehensive quality warranty and timely after-sales maintenance services.

Fifth, Documentation Support: We offer detailed datasheets, user manuals, interface definition documents, and driver development guides to facilitate your product integration and debugging process.

FAQ:

Q1: What is the native resolution of the CH430WQ22A-CT?

A: It has a native resolution of 800×480 pixels (WVGA) in landscape orientation.

Q2: Can I use this display without a touch panel?

A: Yes, the touch panel is optional—you can order it with capacitive touch, resistive touch, or no touch at all.

Q3: What interfaces does this module support out of the box?

A: The standard version uses SPI, but it can be customized to support MCU, RGB, LVDS, MIPI, eDP, or HDMI.

Q4: Is this display suitable for outdoor use?

A: With brightness up to 1500 cd/m² (customizable), it performs well in bright environments, especially with anti-glare options.

Q5: What is the operating temperature range?

A: Standard range is -20°C to +70°C; extended ranges down to -45°C and up to +90°C are available upon request.



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