

4.3 Inch IPS TFT LCD Display Module 480x272 SPI QSPI MCU for Industrial HMI

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: chenghao optoelectronic
- Certification: RoHS & CE & FCC
- Model Number: CH430WQ23A
- Minimum Order Quantity: 100 pcs
- Price: Contact us for quotation
- Packaging Details: Standard Export Package
- Delivery Time: 7-15 work days
- Payment Terms: T/T
- Supply Ability: 300,000 pieces/month



Product Specification

- Module No: CH430WQ23A
- Display Mode: IPS / Transmissive / Normally Black
- Screen Size: 4.3 Inch
- Resolution: 480 X (RGB) X 272 Dots
- Viewing Direction: 80/80/80/80 (All View)
- Screen Brightness: 300 Cd/m²
- Module Interface: SPI / QSPI / MCU
- FPC Pin Numbers: 40 Pins
- Operating Temperature: -20 ~ +70°C
- Storage Temperature: -30 ~ +80°C
- Module Size: 105.5 X 67.2 Mm (LCM Outline)
- Active Area Size: 95.04 X 53.86 Mm



More Images



Product Description

The CH430WQ23A is a 4.3 inch IPS TFT LCD display module with 480 x (RGB) x 272 resolution and flexible SPI, QSPI, and MCU interface support. It provides a typical brightness of 300 cd/m2, 16.7 million colors, and an 80/80/80/80 viewing direction for consistent readability from multiple positions. The display uses an IPS transmissive normally black mode and a 40-pin FPC connection. Its 105.5 x 67.2 mm outline and 95.04 x 53.86 mm active area fit compact control equipment and embedded display designs. The operating temperature range is -20 to +70 degrees Celsius, with storage from -30 to +80 degrees Celsius. This no-touch module is suitable for industrial HMI panels, instrumentation, process monitors, and control terminals that require a stable serial or parallel interface.

Product Features

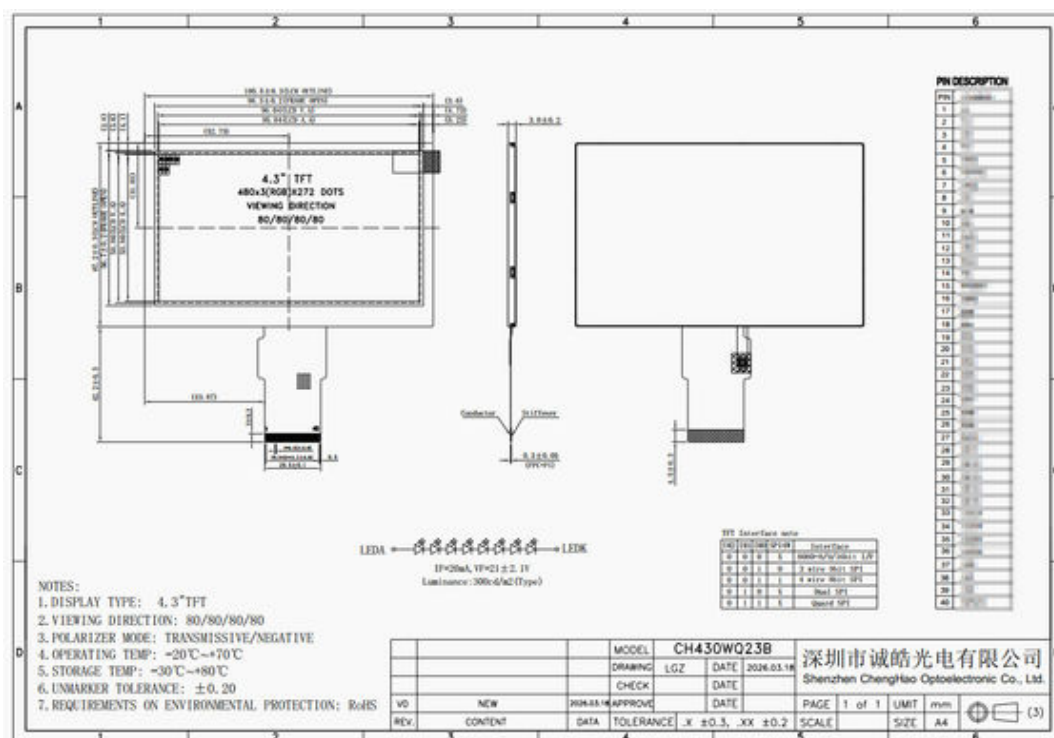
480 x (RGB) x 272 resolution provides clear text, charts, and status information for embedded interfaces.

SPI, QSPI, and MCU interface support provides flexibility across different host controllers and design platforms.

An 80/80/80/80 viewing direction maintains image consistency from multiple operator positions.

A compact 40-pin no-touch design supports straightforward integration into industrial control equipment.

Product Drawing



Detailed Specifications

Item	Value
Module Name	4.3 Inch IPS TFT LCD Module

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Active Area Size	95.04 x 53.86 mm
Touch Type	No Touch

Customized Introduction

Chenghao provides customized display module services for TFT LCD modules, mono LCD displays, color OLED modules, and mono OLED modules. Customization covers FPC layout and pin configuration, interface selection, brightness tuning, touch integration, anti-glare surface treatment, and cover glass design.

- FPC customization includes outline, length, pin count, and connector layout.
- Interface options include SPI, QSPI, MCU, RGB, LVDS, MIPI, EDP, and HDMI.
- Brightness can be tuned for standard indoor use or higher ambient-light environments.
- Capacitive touch, resistive touch, and no-touch configurations are available.
- AG surface treatment can reduce reflections in bright installation areas.
- Cover glass can be customized by thickness, shape, color, and silk printing.

Application Cases

- Industrial HMI Panels:** The 480 x 272 display and flexible SPI, QSPI, and MCU interfaces support compact machine controls and status terminals.
- Process Monitoring Equipment:** Clear operating data and the 80/80/80/80 viewing direction help operators read process values from different positions.
- Instrumentation Displays:** A 40-pin FPC and compact 4.3 inch outline simplify integration into measurement and control equipment.
- Embedded Control Terminals:** The no-touch design and wide temperature range support dependable operation in monitored indoor environments.

PRODUCT FAQ

FAQ

Q1: What interfaces does this display module support?

It supports SPI, QSPI, and MCU interfaces through a 40-pin FPC connection.

Q2: What is the screen brightness?

The module provides a typical brightness of 300 cd/m², and adjusted brightness levels can be offered for suitable projects.

Q3: Does this module include touch functionality?

This version is no touch, while capacitive and resistive touch options can be provided for other configurations.

Q4: What is the operating temperature range?

The module operates from -20 to +70 degrees Celsius and can be stored from -30 to +80 degrees Celsius.



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