

## 8 Inch Industrial TFT LCD Display 480\*1920 Long Strip Display Screen For Extreme Temperature Environments

### Our Product Introduction

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#### Basic Information

- Brand Name: Chenghao Optoelectronic
- Certification: CE, ISO9001, Rose, SGS
- Model Number: CH800FH01A
- 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: T/T, AliPay, PayPal
- Supply Ability: 50000000 Pcs/month



#### Product Specification

- Active Area: 218.88x54.72 Mm
- Storage Temperature: -30 ~ +80
- Operating Temperature: -20 ~ +70
- Viewing Area: 219.48x55.32 Mm
- Outline Size: 231.3x64.3x4.8 Mm
- Resolution: 480x1920 Dots
- Screen Brightness: 500 Cd/m2
- Contrast: 800 1
- Highlight: 8 inch industrial TFT LCD display, 480x1920 long strip LCD screen, extreme temperature LCD display module



#### More Images



## Product Description

### Product Description:

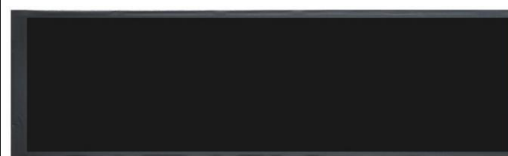
The CH880FH01A, a high-performance 8 inch long strip tft lcd module developed by Chenghao Optoelectronic, emerges as a targeted solution for modern devices requiring elongated display interfaces without compromising on visual quality or reliability. As a factory-wholesaled product with a focus on versatility, it caters to a broad spectrum of clients—from industrial equipment manufacturers to smart home device developers—by blending specialized design, robust performance, and flexible support services, all while adhering to strict quality standards that define Chenghao Optoelectronic's product lineup.



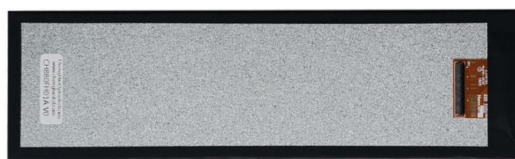
At the heart of the CH880FH01A's appeal is its precisely engineered physical structure, tailored to fit space-constrained environments. With an overall module size of 231.3x64.3 mm, it strikes a balance between a generous display area and a slim, elongated form factor—ideal for integration into narrow installations where traditional square or rectangular displays would be impractical.

The visible area spans 219.48x55.32 mm, while the active display area measures 218.88x54.72 mm, ensuring that nearly the entire front-facing surface is utilized for content presentation, minimizing wasted space and maximizing information density. Structurally, the module is a complete color active matrix TFT LCD assembly, combining a high-quality TFT LCD panel, precision driver ICs, a uniform backlight system, and a flexible FPC (Flexible Printed Circuit) for seamless connectivity—all built around amorphous silicon TFT switching devices, which guarantee stable signal transmission and consistent display performance over time.

Functionally, the 8 inch long strip tft lcd module stands out with display capabilities that rival larger, more conventional modules. It adopts an IPS (In-Plane Switching) display mode paired with transmissive technology and a normally black design, a combination that delivers exceptional color accuracy and wide viewing angles of 80/80/80/80 degrees.



This means users can view the display from virtually any position—whether standing to the side of an industrial control panel or sitting in a vehicle's rear seat—without experiencing color distortion, brightness loss, or contrast degradation. Complementing this is a high resolution of 480x1920 dots, which translates to sharp, detailed visuals, even when displaying small text, complex graphics, or real-time data streams. With support for 16M colors, the module reproduces hues with remarkable fidelity, making it suitable for applications that demand vivid, lifelike displays, such as smart home control strips showing environmental data or vehicle-mounted auxiliary screens presenting navigation prompts.



Brightness is another key strength of the CH880FH01A, with a standard output of 500 cd/m<sup>2</sup>—sufficient to maintain clear visibility in bright environments, from sunlit industrial workshops to well-lit retail spaces, without requiring excessive power consumption.

The module's interface choice further enhances its adaptability: it uses the MIPI (Mobile Industry Processor Interface) standard, a widely adopted protocol known for its high-speed data transmission, low electromagnetic interference, and efficient power usage. This makes integration straightforward for clients working with modern microcontrollers and control systems, reducing development time and ensuring smooth, lag-free performance when displaying dynamic content.

Environmental resilience is a critical feature for a module designed for diverse applications. The CH880FH01A operates reliably within a temperature range of -20 ~ +70 °C, allowing it to withstand the heat of summer vehicle interiors, the cold of unheated industrial warehouses, and the daily temperature fluctuations of smart home environments. For storage, it can tolerate even wider temperatures, from -30 ~ +80 °C, ensuring that inventory remains viable regardless of storage conditions.

To further support client needs, Chenghao Optoelectronic offers sample provision and customization services for the CH880FH01A, alongside a factory wholesale model with a 100-piece MOQ. This combination of specialized design, robust performance, and client-centric support positions the 8 inch long strip tft lcd module as a standout choice for projects that require an elongated display solution that does not compromise on quality, reliability, or adaptability.

### Features:

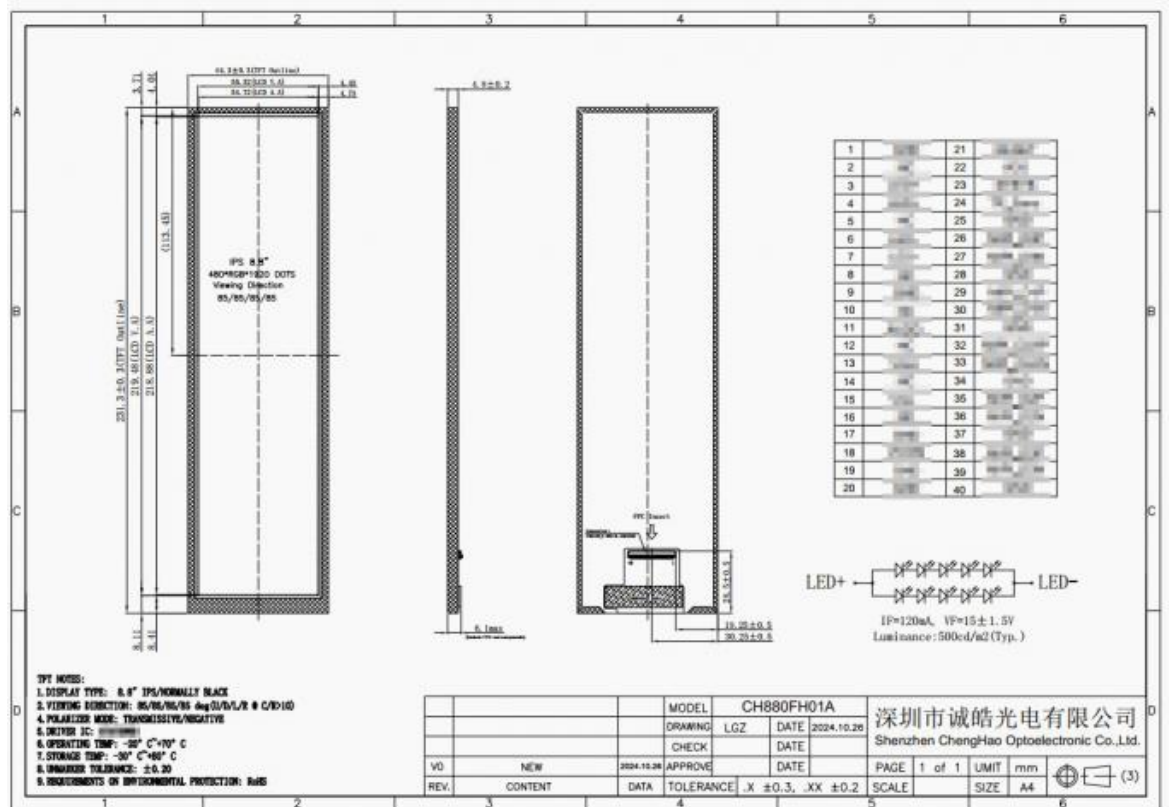
**Space-Optimized Elongated Structure:** With a 231.3x64.3 mm module size and 218.88x54.72 mm active area, it maximizes information density in narrow spaces—its slim, long form avoids wasting installation room, making it perfect for devices where traditional square displays are incompatible.

High-Brightness & Low-Power Interface: 500 cd/m<sup>2</sup> brightness guarantees readability in strong light (e.g., sunlit workshops) without high power use; the MIPI interface enables fast data transfer with minimal electromagnetic interference, cutting integration and operation costs.

Dual-Temperature-Range Resilience: Beyond -20~+70 operating temperature, it handles -30~+80 storage, protecting inventory in extreme warehouse conditions and ensuring long-term use in environments with sudden temperature changes.

## Technical Parameters:

Operating Temperature	-20 ~ +70
Viewing Direction	80/80/80/80
Interface	MIPI
Color	16M
Storage Temperature	-30 ~ +80
Viewing Area	219.48x55.32 mm
Outline Size	231.3x64.3x4.8 mm
Contrast	800:1
Screen Brightness	500 Cd/m2
Active Area	218.88x54.72 mm



## Applications:

### 1. Medical Equipment

In medical equipment, the CH880FH01A 8-inch long strip TFT LCD module is integrated into portable patient monitoring devices and bedside infusion pumps. For portable monitors, its 231.3x64.3 mm elongated size fits the narrow panel of handheld devices, displaying real-time vital signs like heart rate, blood oxygen, and body temperature in a clear, sequential layout. The IPS technology's 80/80/80 viewing angles allow medical staff to check data from different positions (e.g., standing beside the patient's bed or holding the device at an angle) without color distortion—critical for accurate diagnosis. With a 500 cd/m<sup>2</sup> brightness, it remains visible even under the bright overhead lights of operating rooms or wards, while the -20~+70 operating temperature range adapts to the cool environment of medical storage rooms and warm ward settings, ensuring reliable performance for patient care.



## 2. Instrumentation

Within instrumentation, the module serves as a key display component for industrial pressure gauges and flow meters. Its 218.88x54.72 mm active area is ideal for showing continuous data trends—for example, in a gas flow meter, it can display real-time flow rates, cumulative usage, and alarm thresholds in a horizontal, easy-to-read format. The 480x1920 high resolution ensures small numerical values and trend lines are sharp, helping technicians identify subtle changes in equipment performance. The MIPI interface enables fast data updates, ensuring the display synchronizes instantly with sensor readings, while the module's durable structure resists the minor vibrations common in factory instrumentation setups, maintaining stable operation for long-term industrial use.

## 3. Artificial Intelligence (AI) Equipment

In AI equipment, the CH880FH01A is applied to AI-powered smart sorting systems and AI environmental analysis terminals. For smart sorting systems in logistics warehouses, its long strip design fits the narrow control panel above conveyor belts, displaying AI-identified product categories (e.g., "electronics," "clothing") and sorting destinations in real time. The 16M color support allows the module to use distinct colors for different categories, helping workers quickly match sorted items to the correct routes. In AI environmental analysis terminals, the module shows real-time air quality indices, pollutant concentrations, and AI-generated prediction trends—its high brightness ensures readability in outdoor warehouse yards, and the -30~+80 storage temperature range protects the module during long-term outdoor storage, making it a reliable choice for AI-driven industrial and environmental monitoring scenarios.

## FAQ:

**Q: How long is the warranty period for the CH880FH01A, and does it cover damage caused by improper installation?**

A: The standard warranty period is 13 months from the date of delivery; it does not cover damage from improper installation, but we provide installation guidelines to help clients avoid such issues.

**Q: If the CH880FH01A shows abnormal color display during use, what after-sales support can I get?**

A: You can contact our after-sales team via email or online portal; we will first guide you through remote troubleshooting (e.g., checking interface connections), and if the issue persists, we offer module replacement or repair per warranty terms.

**Q: If I receive a batch of CH880FH01A with minor appearance defects (e.g., small scratches on the lens), how will the after-sales team handle it?**

A: We accept return requests within 7 days of receiving the goods; after confirming the defect via photos/videos, we will arrange a replacement batch and cover the return shipping costs.





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