3.12 Inch 256x64 OLED Display Module with SPI Interface and 16 Greyscale

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: BBI
- Certification: ISO90001 RoHS
- Minimum Order Quantity: 1000
- Price: 0.7-7USD
- Packaging Details: CARTON
- Delivery Time: 3-47WEEKS
- Payment Terms: T/T
- Supply Ability: 100000/MONTH

Product Specification

- Operating Temperature: -30°C To +85°C
- Connect: 4 Wires SPI Interface
- Outline Size: 100.5(L) X 33.5(W) X 6.3(T) Mm
- Display Mode: Passive Matrix
- Driving Method: 1/64 Duty Cycle
- Optics: All Viewing Angles
- Active Area: 76.78(L) X 19.18(W) Mm
- Supply Voltage: 3v
- Highlight: **256x64 Resolution OLED Display Module**, **3.12 Inch OLED Screen**, **SPI Interface OLED Module**

Our Product Introduction

for more products please visit us on lcdtftscreen.com

Product Description

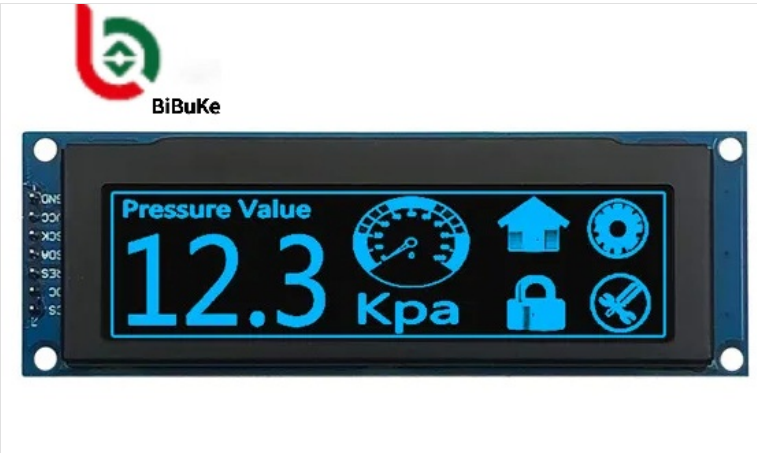
COF 256x64 OLED Display Module 3.12" Inch 16 Greyscale 3.3V Power

Product Specifications

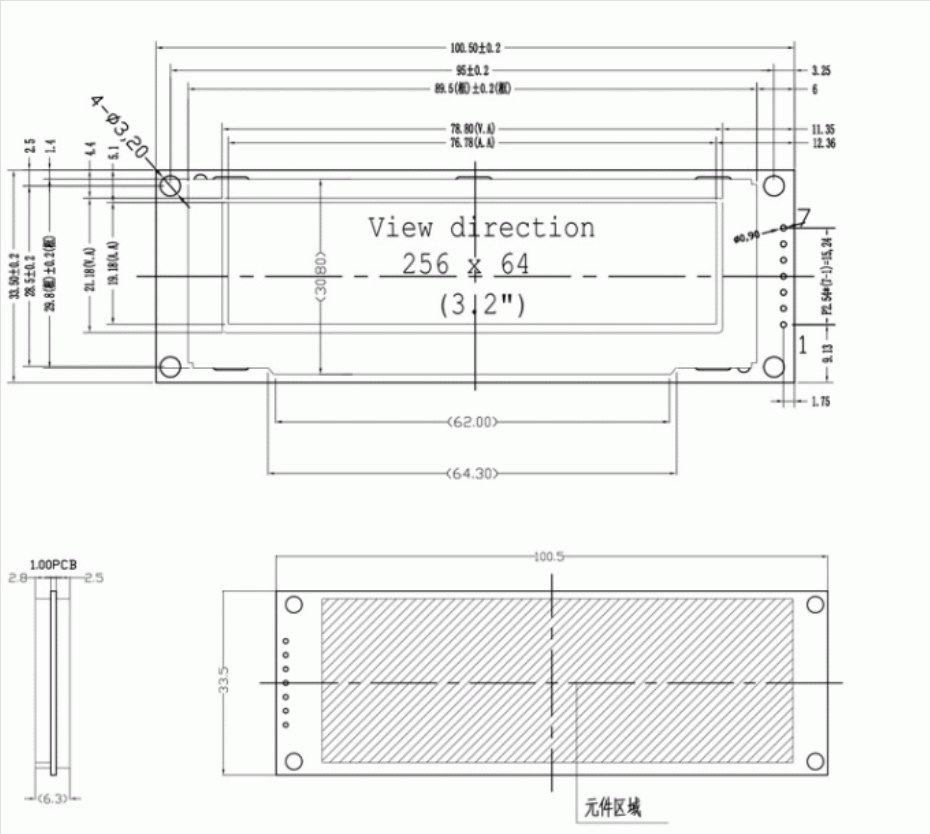
Product	3.12" 256x64 COF OLED Display
Resolution	256x64 Dots Resolution
Display Mode	Passive Matrix
Interface	4 Wires SPI Interface
Optics	All Viewing Angles
Outline Dimensions	100.5(L) X 33.5(W) X 6.3(T) mm
Active Area	76.78(L) X 19.18(W) mm
Driving Method	1/64 Duty Cycle
GreyScale	16 Greyscale
Controller	SSD1322U
Operating Temperature	-30°C To +85°C
Storage Temperature	-40°C To +90°C
Font Color	White/Blue/Yellow/Green
Supply Voltage	3V

Product Features

- 256 x 64 pixel resolution for clear graphics and text display
- Ultra-wide viewing angle exceeding 160 degrees
- Low power consumption: 0.04W normal operation, 0.08W full screen
- Compatible with Arduino Mega, Raspberry Pi, 51 MCU, STM32, and more
- Embedded driver IC requiring only 2 I/O ports for I2C interface communication
- Self-illuminating design with no backlight required
- High contrast ratio with bright, clear dots for excellent readability
- Available in four color options: blue, white, yellow, green
- Compatible with MMDVM, Pi-Star, and Raspberry Pi systems



Product Drawing



Technical Parameters

Size and Resolution: 3.12-inch diagonal with 256x64 pixel graphic dot matrix display. Effective display area measures approximately 76.78mm x 19.18mm.

Display Technology: OLED technology with self-illuminating characteristics, eliminating the need for backlight. Features high contrast and fast response speed.

Grayscale and Colors: 16 gray levels providing rich color gradations. Available in single colors including white, yellow, blue, and green.

Driver Chip: Built-in SSD1322 driver chip delivering high contrast ratio of 20,000:1 with comprehensive display functionality support.

Interface Method: Supports SPI and parallel interfaces for easy connection with various microcontrollers including Arduino, ESP32, and STM32.

Power Supply: Operates on 3.3V power supply with low power consumption. Compliant with RoHS standards.

Operating Temperature: Wide operating range from -40 to 85 for reliable performance in diverse environmental conditions.

Application Areas

Industrial Control: Display real-time data from instruments including temperature, pressure, and voltage. High contrast and wide viewing angle ensure clear visibility from multiple perspectives.

Medical Equipment: Suitable for blood glucose meters, blood pressure monitors, and portable health detectors, providing clear display of test results and operation menus.

Smart Wearables: Ideal for smart bracelets and electronic watches, offering low power consumption, compact size, and high contrast for clear display of time, steps, heart rate, and other information.

Consumer Electronics: Applied to MP3 players and feature phones for displaying song information, call displays, and menu options.

POS Systems: Used in cash registers and POS devices to display product information, transaction amounts, and operation prompts for efficient transaction processing.

DIY Projects: Popular among electronic enthusiasts and makers for custom projects including electronic scales, weather stations, and smart night lights with personalized display capabilities.

Frequently Asked Questions

I want the LCD display 8 digits and the outline size is 65x30x2.8mm. Is this possible?

Yes, we can accommodate your requirements. Please provide your detailed specifications or drawing. If you don't have specifications, you can send samples and we'll recommend suitable standard products or customize based on your specific requirements.

This LCD is what we want, but it's too large. Do you have smaller sizes? Also, the display content needs minor modifications.

For segment type LCD modules requiring outline size modifications or display content changes, we need to create a new LCD glass module. This requires opening new tooling specifically for your project.

This LCD display is HTN type, but I want STN type. Can you manufacture this?

Yes, we can modify the display type according to your requirements.

I want to customize a new LCD module. Can you do this?

Yes, we offer custom manufacturing services. Please provide your drawing. If you don't have a drawing, please specify the outline size, display information (glass thickness, polarizer, display type, connector mode, storage temperature, operating temperature, supply voltage, viewing direction, drive condition), and we'll customize according to your specifications.

What is the lead time for tooling?

Typically, tooling requires 15 to 25 days after drawing confirmation and tooling charge payment. We'll provide the exact timeline once you confirm the drawing.

Can you send us samples for evaluation?

Yes, sample orders are available for quality verification.

What is the lead time for production?

For standard products in stock, lead time is one day after payment. For mass production of custom products, lead time is approximately 15-30 days. If we can complete production earlier, we'll notify you in advance.

Dongguan Bibuke Electronic Technology Co., Ltd.

+8613711912723 Jack@smartwinlcd.cn lcdtftscreen.com

Shangyu Commercial Centre Chang'an, Dongguan, Guangdong, China 523881