

SHENZHEN CDTECH ELECTRONICS

TFT-LCD MODULES  
**12.1-Inch**  
**1280\*800 LCD**  
**Displays**



## 4 Major Applications

**Automotive**



**Industrial Control**



**Medical**



**SmartHome/Kitchen**



STANDARD



**S121BW04ND-DC10-AF V1.0**

Cost-Effective Industrial Standard



BRIGHTNESS  
**300 nits**



OP. TEMP  
**-20°C ~ 70°C**

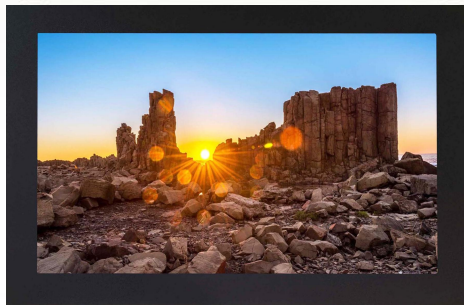


TOUCH IC  
**GT9110 (IIC)**



INTERFACE  
**LVDS 20pin**

CUSTOM



**S121BW05EP-Series**

Customize backlight, black tape and touch panel



BRIGHTNESS  
**800-1000 nits**



OP. TEMP  
**-20°C ~ 70°C**

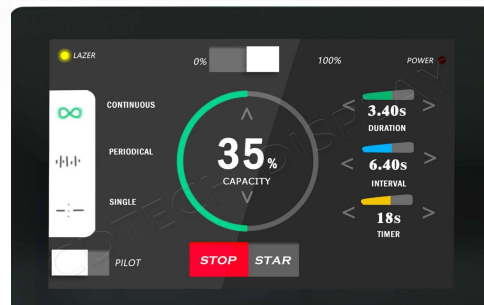


TOUCH IC  
**GT9110 (IIC) or  
ILI2511**



INTERFACE  
**LVDS 40PIN**

HIGH PERFORMANCE



**S121IW09EP-FC18 V1.0**

High-Performance Outdoor Ready



BRIGHTNESS  
**800 nits**



OP. TEMP  
**-20°C ~ 70°C**



TOUCH IC  
**ILI2511 (USB+IIC)**



INTERFACE  
**4-lane LVDS**

# Series Comparison Table

Detailed breakdown across the 04, 05, and 09 model families.

FEATURE	04 SERIES (STANDARD)	05 SERIES (FAMILY)	09 SERIES (HIGH-END)
Model No.	S121BWX04ND-DC10-AF	S121BWX05... (4 variants)	S121IWX09EP-FC18
Brightness	300 nits	800 - 1000 nits	800 nits (High Brightness)
Viewing Angle	ALL (IPS-like)	ALL	ALL (IPS)
Touch IC	GT9110	GT9110 / ILI2511 / None	ILI2511 (Adv. Features)
Touch Interface	IIC	IIC / USB / Integrated	USB + IIC
Display Interface	LVDS 20PIN	LVDS 30/40PIN	4-lane LVDS (High Speed)
Special Features	Standard Stability	Variety of Interfaces	Water/Glove Touch Support

STANDARD



**S121BW04ND-DC10-AF V1.0**

Cost-Effective Industrial Standard







## Key Product Features



### Robust Wide-Temperature Operation

Engineered to withstand harsh industrial environments, operating reliably from -20°C to +70°C and storage up to +80°C.



### Wide Viewing Angle (IPS Mode)

Features 'ALL' viewing direction technology, delivering consistent color accuracy and contrast from any angle.



### Reliable G+G Touch Solution

Integrated GT9110 capacitive touch controller with Glass+Glass structure ensures durability (6H hardness) and precise 10-point multi-touch.



### Standard Industrial Integration

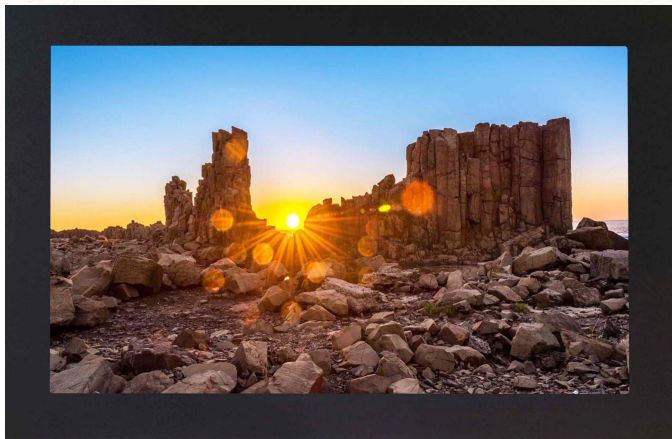
Utilizes a standard LVDS 20-PIN interface and IIC touch connection, making it a drop-in solution for many legacy and new industrial designs.



## Technical Specifications

- Active Area: 261.12 \* 163.20 mm
- Resolution: 1280 RGB \* 800
- Viewing Direction: ALL
- Touch Structure: G+G (Glass on Glass)
- Backlight: LED
- Connector: FPC 20PIN 1.0mm

CUSTOM







### **S121BWX05EP-Series**

Customize backlight, black tape and touch panel

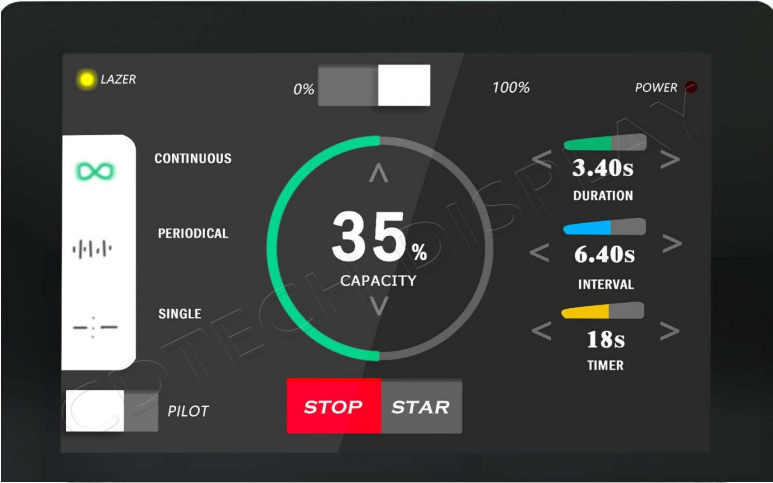


Specification Matrix

Specifications	Standard Model	Non-Touch Variant	High Integration	Flexible I/O
	S121BWX05EP-FC10 V1.0	S121BWX05ED V1.0	S121BWX05EP-FC14-ZJB04-A-3	S121BWX05EP-FC15-5 V4.0
Product Image				
Touch Panel (CTP)	Included (with TP)	Not Included (without TP)	Included (with TP)	Included (with TP)
Module intergration	Standard Touch Module	Standard Base Module	High Integration (All-in-One PCB)	Standard Touch Module
Backlight / Power	VF=23-26.5V IF =360mA	VF=23-26.5V IF =360mA	2V; IF=990mA (TYP)	VF=23-26.5V IF =360mA
LCM Interface	LVDS 40PIN	LVDS 40PIN	LVDS 30PIN	LVDS 40PIN
CTP IC	ILI2511	-	ILI2511	ILI2511
CTP Interface	I <sup>2</sup> C	-	I <sup>2</sup> C	I <sup>2</sup> C+USB
Key Advantage	Basic TP version, ready for plug and play.	Display without touch panel, high design flexibility.	High integration, simplified wiring, customized backlight.	Flexible USB/IIC touch interface, customized TP.



HIGH PERFORMANCE



**S121IW X09EP-FC18 V1.0**

High-Performance Outdoor Ready





## Key Product Features



### Sunlight Readable High Brightness

Boasts an 800-nit high-luminance backlight, ensuring crystal-clear visibility even in bright outdoor or high-ambient-light factory environments.



### Versatile Dual-Interface Connectivity

Offers both USB and IIC touch interfaces, providing maximum flexibility for integration.



### Advanced Environmental Touch (ILI2511)

Powered by the ILI2511 IC, supporting advanced industrial requirements including water rejection (wet hand operation) and thick glove support.



### High-Speed Signal Integrity

Utilizes a robust 4-lane LVDS interface (GH8323-i1 Driver) for superior data transmission stability and EMI performance in noisy electrical environments.



## Technical Specifications

- Active Area: 260.35 \* 162.72 mm
- Touch IC: ILITEK ILI2511
- Interface: 4-lane LVDS
- Resolution: 1280 RGB \* 800
- Backlight: 8S7P (High Eff.)
- Connector: SFC-05XX4000-H10

# Customization Service

## Backlight

- Brightness
- LED Driver

## Bonding

- Air Bonding
- Optical Bonding

## Touch Panel

- Capacitive Touch Panel
- Resistive Touch Panel

## POL

- High Temperature
- Viewing Angle Optimization

## Interface

- FPC Dimension
- Pinout Customization

## Operate Temp.

- Component Selection
- Backlight Optimization

# Quality Stability Advantage



## Testing System

Establish a comprehensive testing system perform multiple tests on products such as high temperature low temperature and damp heat testing ensure product quality



## Reliability Validation

Supports the option of selecting touch driver ICs compliant with AEC-Q100, vibration resistance tested at 20–2000Hz, certified UV resistance per DIN75220, MTBF up to 80,000 hours, and full PPAP documentation support.



## Customer Feedback Validation

Collect customer feedback for validation and improvement optimize product design and production process based on customer input enhance quality



## Quality Standard Setting

Set strict quality standards with clear quality requirements for every step from raw material procurement to product delivery

**Thank you!**