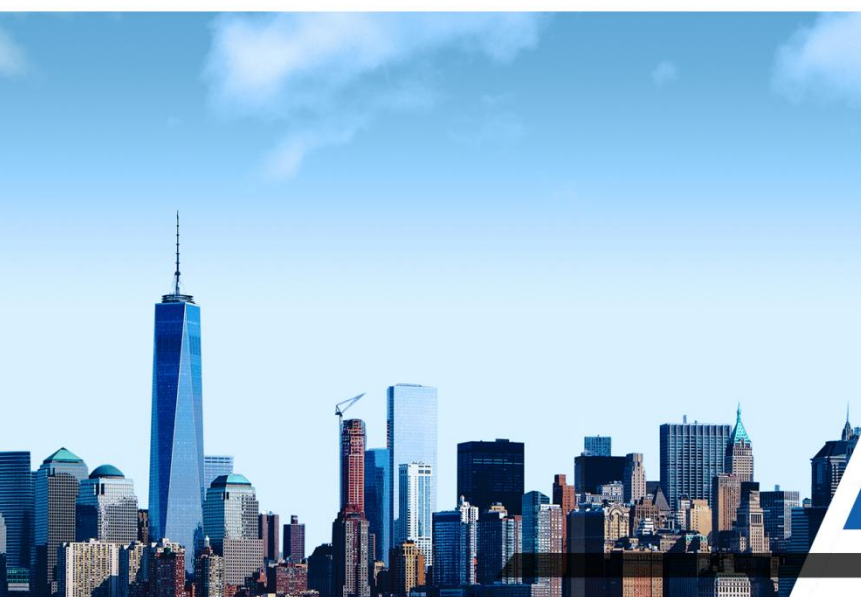




Android Control Card Y50

Product Specification

Version: Ver.3.2

Statement

Dear user friend, thanks for choosing SHENZHEN SYSOLUTION TECHNOLOGY CO.,LTD referred to as Sysolution Technology) as your LED advertising equipment control system. The main purpose of this document is to help you quickly understand and use the product. We strive to be precise and reliable when writing the document, and the content may be modified or changed at any time without notice.

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Update Record

No.	Version	Updates	Revision Date
1	Ver.1.0	Initial Release	2021.12.23
2	Ver.2.0	Add content	2022.06.02
3	Ver.2.1	Updating Specifications	2022.06.28
4	Ver.2.2	Update Size Diagram	2025.01.08
5	Ver.2.3	Add product weight	2026.04.16
6	Ver.2.4	Update Authentication Information	2023.01.13
7	Ver.2.5	Resolution Update	2023.12.07
8	Ver.2.6	Update Content	2024.05.20
9	Ver.3.0	Update Size Image	2025.01.08
10	Ver.3.1	Update product images, interface definitions, etc.	2025.12.04
11	Ver.3.2	New Product Weight	2026.04.16

The document is subject to change without prior notice

Product Introduction

Sysolution Y50 can release programs and display control through PC, mobile phone, Pad and other user terminals, support wireless transmission, and can avoid the trouble of wiring, and configure the wireless network like a router; Support the release of access to the cloud platform, and easily realize the remote cluster management and control of the display screen; Hardware and software design fully consider user deployment, operation and maintenance scenarios, making deployment easier, operation more stable and maintenance more efficient; With safe and stable function design, it can save space and reduce wiring for users. It can be used in small load scenes such as car screen, small traffic screen, community screen, lamp pole screen, etc.

Y50 series can withstand 90 °C high temperature and can operate stably, and the memory supports 1gb+8gb (compatible with 2gb+16gb) LPDDR3. The chip can support GSM, WCDMA, TD-SCDMA, EVDO, TDD-LTE, FDD-LTE and other systems. It is a highly integrated product.

Function Characteristics

1. The information release platform passes the third level Filing Certificate of information system security of the Ministry of public security, and provides copies and seals;
2. The materials of the information transmission platform have passed the approval of audio-visual program of information network communication, and copies and seals are provided
3. Have the national quality inspection stable and qualified product certificate, and provide copies and seals;
4. Two Gigabit network ports are output, and one network port is used as backup to ensure the stability of image transmission;
5. Support the external connection of eight element environmental sensor R68 through 485 interface to display environmental information without secondary development;
6. Support the external Lora synchronization module to ensure the synchronization of multi screen display;
7. Support two-way remote power-off, one control panel switch and one control street lamp switch;
8. Support optional 4G modules. The models of modules in different countries are different. Please provide the country of use for shipment. Support optional 4G modules. Different models fits for different countries. Please confirm the country before shipment;
9. Offer FCC、CE certification;
10. Lora wireless timing multi screen synchronization;

11. Onboard WiFi module for wireless communication;
12. Support AP mode and Station mode;
13. Support secondary development and remote cluster control of cloud platform;
14. Built in web server, it supports local web page production, program release and display control of PC, mobile phone, pad and other user terminals, cluster remote program release and display control, and cluster remote monitoring of screen status;
15. support 1080p video hard decoding, 1GB running memory , 8GB internal storage space, 4GB available to users;
16. The user terminal connects to the WiFi hotspot of Y50. The default SSID is "SN number" and the default password is "12345678";
17. Support GPS timing / timing;
18. Dual ports with super load capacity, resolution 1280*720;
19. It can automatically adjust the brightness of the display screen with a brightness sensor;
20. Support to play programs according to the program list;
21. The timing switch, volume and brightness can be set centrally through the management system;
22. Support USB camera (non drive);
23. Support NTP precise automatic timing;
24. Software kit: LEDOK IOTcloud platform, PC software LedOk Express, mobile APP: LedOK Kit.

Product Appearance



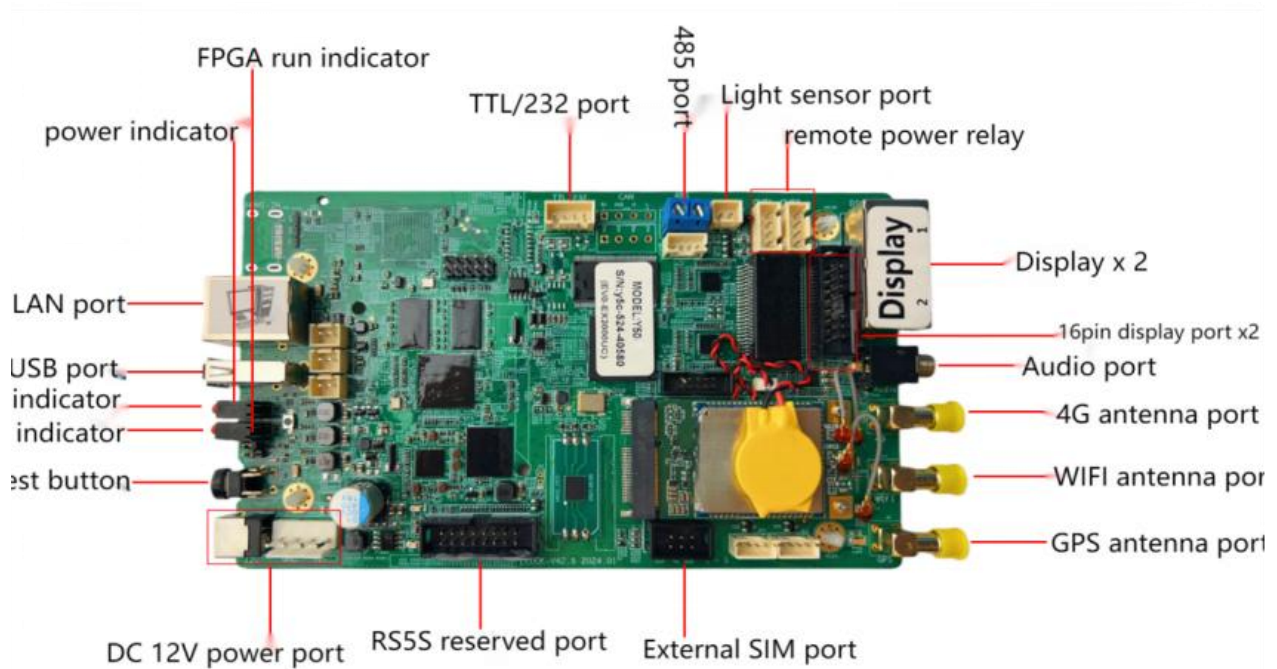
Product Parameters

Features	Description	
Type	Y50-WIFI (no 4G) /Y50-NA、Y50-EU、Y50-LA、Y50-G、Y50-J	
Pixel	Y50: 1,300,000 pixels, resolution 1920 (w) *512 (h) , custom resolution support	
Communication mode	Ethernet port、WiFi、USB	
System memory	8GB Emmc+1GB LPDDR3	
Operating system	Android 9	
WiFi	IEEE 802.11b/g/n 2.4G	
GPS	GNSS GPS/Beidou/Glonass	
Other interface support	● 1 channel stereo audio output ● 1 USB2.0 port ● Support play program through USB ● 1 RS485 port, 1 RS232、 1 TTL serial port. Connect to light sensor or other sensors, as well as connecting to other modems to realize other functions.	
Configuration software	LEDOK Express	
Support frequency band		
Type	3G/4G (optional)	Certificate

Y50-CH	-China (China/India) FDD-LTE: B1/3/5/8 TDD-LTE: B38/39/40/41 TDSCDMA: B34/39 WCDMA: B1/8 CDMA 1X/EVDO: BC0 GSM: B3/5/8	Compulsory Certification: SRRC/ NAL/ CCC Others : WHQL
Y50-NA	-North America FDD-LTE: B2/4/5/7/12/13/17 WCDMA: B2/4/5	Operator certification: AT&T/ T-Mobile/Rogers/ TelusVerizon/AT&T (FirstNet)/T-Mobile/U.S. Cellular/Rogers/ Telus Mandatory / conformance certification: FCC/ IC/ PTCRB Others : WHQL
Y50-EU	-Eurasia (EMEA/Korea/Thailand/India and other Asian countries) FDD-LTE: B1/3/5/7/8/20 TDD-LTE: B38/40/41 WCDMA: B1/5/8 GSM: B3/5/8	Operator certification: Vodafone/Deutsche Telekom/SKT/ Telefónica Mandatory / conformance certification: GCF/ CE/ KC/ NCC/RCM/ FAC/ NBTC/ICASA Others : WHQL

Y50-LA	-Latin America (LA/AU/Newsland) FDD-LTE: B1/3/5/7/8/28 TDD-LTE: B40 WCDMA: B1/2/5/8 GSM: B2/3/5/8	Compulsory Certification: GCF/ FCC/ Anatel/ NCC/RCM Others: WHQL
Y50-G	-Global FDD-LTE: B1/2/3/4/5/7/8/12/13/ 18/19/20/25/26/28 TDD-LTE: B38/39/40/41 WCDMA: B1/2/4/5/8/6/19 GSM: 4 frequencies	Operator certification: Deutsche Telekom/ Verizon/ AT&T/ Sprint/U.S. Cellular/ Telus Mandatory / conformance certification: GCF/ CE/ FCC/ PTCRB/ IC/ Anatel/IFETEL/ SRRC/ NAL/ CCC/ KC/ NCC/ JATE/ TELEC/ RCM/ NBTC/ IMDA/ICASA others: WHQL
Y50-J	-Japan FDD-LTE: B1/3/8/18/19/26 TDD-LTE: B41 WCDMA: B1/6/8/19	Operator certification: NTT DOCOMO/SoftBank/ KDDI Compulsory Certification: JATE/ TELEC Others : WHQL

Interface Parameters/Define



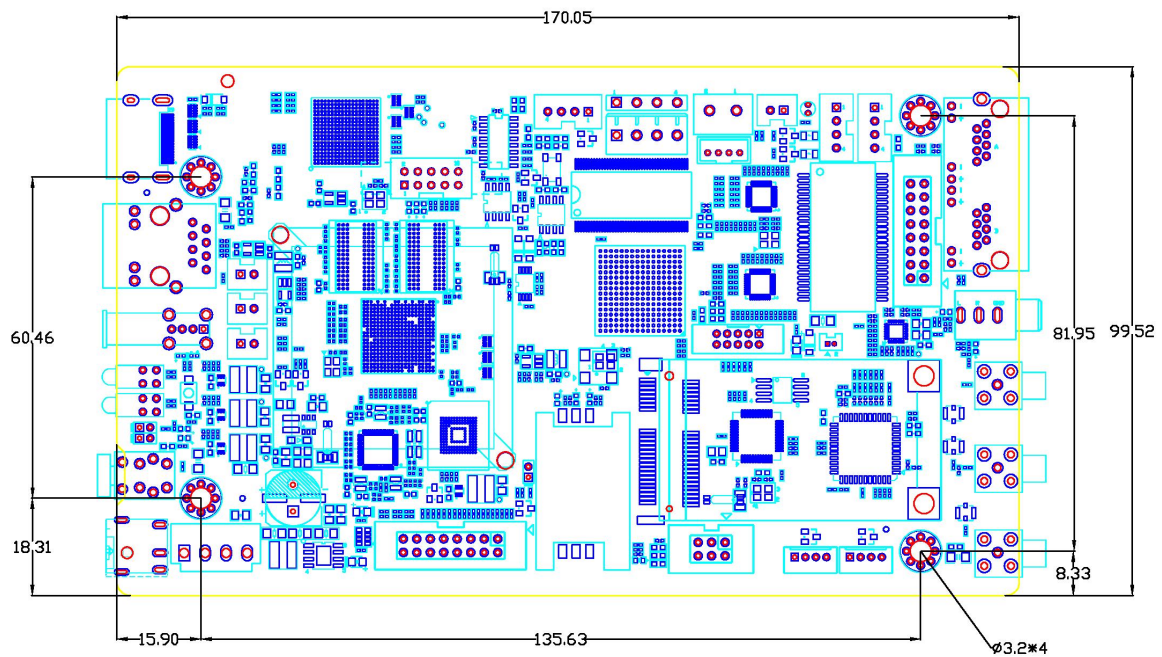
Product Interface Labeling

Working Conditions

Working parameters	
Working voltage (V)	5.0V/12V
Working current (A)	0.9A Max: 3A
Maximum working power consumption (W)	10
working temperature (°C)	- 40°C ~ + 95°C
Storage temperature (°C)	-40°C ~75°C, Recommend 5°C ~35°C
Humidity of working environment (%)	10% ~ 90%, No condensation
Size (mm)	170mm×99.5mm
net weight (g)	144g
Weight with packaging box (g)	274g

1. It is recommended to use an independent (12V/3A or above) power supply for the control card;
2. High working temperature will cause a sharp decline in power efficiency. If the control card and the module share the same power supply, please ensure that the control card has a stable voltage and a reasonable actual current supply.

Dimension Drawing



Unit: mm

Installation dimensions of the bare plate

Parts

Standard accessories	Size/Quantity
WiFi patch antenna	1.5m*1
4G patch antenna	1.5m*1
Optional accessories	Accessory function
Temperature & humidity Sensor RTH2	To detect external temperature and humidity
Humidity lineRH1	Used to detect the humidity of the current external environment
Brightness lineRL2	Used to sense the brightness of the current environment
Optional multi-function card RS5 integrated synchronization module, 5-way voltage detection, door opening and closing and smoke interface (optional RD1 door sensor, RM1 smoke sensor)	Power detection
Eight in one environmental sensor R68	Temperature, humidity, illumination, PM2.5, PM10, noise, wind speed, wind direction
G10	GPS Positioning module
Matching accessories (the above options, according to the order needs to place another corresponding model)	

Notes

1. The input voltage of the power supply of this product is 12V and the voltage range is 5V ~ 12V. Please strictly ensure the quality of the power supply of Y50 series.
2. When connecting or disconnecting any signal or control cables, make sure all power cables are unplugged beforehand.
3. Make sure all signal and power cables are unplugged beforehand when you want to add hardware devices to or remove hardware devices from the product.
4. Before any hardware operation, please turn off the power of the control card and discharge the static electricity on your body by touching a grounded surface.
5. Please use the product in a clean, dry and ventilated environment, do not put the product into high temperature, humidity and other environments.
6. This product is an electronic product, please keep it away from fire, water and flammable, explosive dangerous goods.
7. There are high-voltage parts in this product, please do not open the case or repair the equipment by yourself.
8. If you find smoke, odor and other abnormalities, please immediately turn off the power switch and contact the dealer.