


正面



**WD1102A  
ELECTRONIC SHELF LABEL**

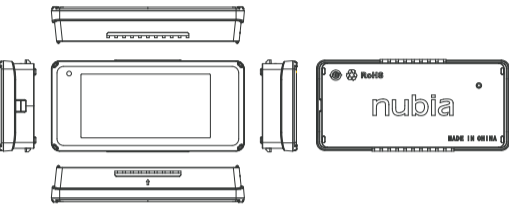
### Introduction

Electronic Shelf Label(ESL)is a price information display device of electronic and intelligent. Can be fixed on the shell, Receive and display product information through wireless technology, It can replace the traditional paper label.

Label device using 2.13 inch, 2.66inch, 2.9 inch, 4.2 inch, 5.8 inch, 7.5 inch, 10.2 inch Universal electronic paper. It has the characteristics of bistability, wide viewing angle and high contrast, It can significantly improve the image of the store.

### Product drawing

2.13 inch

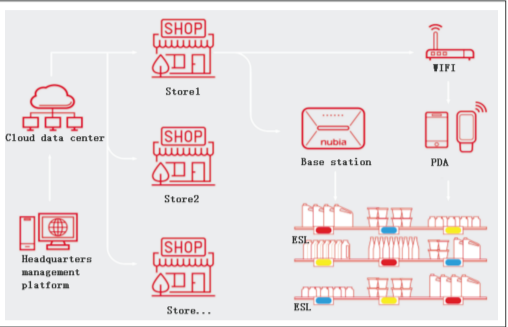


### Product features

- Connection mode: 2.4GHz wireless frequency
- Size: 2.13/2.66/2.9/4.2/5.8/7.5/10.2 inch
- Display: Transmission through PNG picture format, Update the price tag display content through the corresponding template distributed by the base station;
- Debug information: Displays the current working channel of the price tag, the average voltage of the battery, the number of locked base stations, the number of base stations issuing, the number of reporting, and the version numbers of hardware and software
- Display colors: Black, white and red
- Display characteristics:High contrast and wide viewing angle
- Endurance time: The standby current is less than 5uA;
- Mounting: Adapt to guide rail, swing table, hook and other scenes, Unified installation interface.
- Bar code: Radium engraved bar code on the shell,Water-proof, antifouling and anti loss
- Logo: Customized logo;
- LED: Specific needs can be customized according to customers;
- LBS location, Locate the location of the ESL, according to the beacon information, The accuracy is about 1m;
- Battery: The battery cover can be removed and the battery can be replaced;

### Application description

As the display terminal of the whole system, the tag should work together with the base station and ESL server.



The tag is automatically managed by the server through 2.4G, which can realize different operation scenarios: display the tag IP, scan the IP through the handset or bind / unbind the app with the commodity barcode, and apply for re obtaining the price tag data from the base station.

### Electrical characteristics

#### Common parameters of electronic price tag

parameter	Range	Remarks
Working temperature (normal temp)	0-40℃	Display screen
Storage temperature	-20-60℃	Display screen
Use screen working temperature	-20-40℃ (-13inch)	Display screen
Waterproof grade	IP54	
Endurance time	5 years	Refresh 4 times a day
display technique	E-ink	
material	ABS+PC	
Identify	0.226*0.227mm	
Battery	CR2450	2pcs/group
Battery capacity	600mAhx2	
Encryption mode	AES-128	
LED	RED	
Transmission frequency	2.4GHz/2.4835GHz	
language	Chinese/English	PNG format picture
Update	OTA	

#### DC characteristics of display screen

Working voltage	Vcc	2.2	3.3	3.7	V	
Working current	IOPR	Vcc=3V	2	2.4	2	mA
Standby current	Idle	Vcc=3V				uA
Wireless frequency	F		2.4			GHz

#### Working characteristics

parameter	Typical value
ESL display	Report the tag heartbeat every 3-10 minutes and receive the base station instruction within 15 seconds
Refresh success rate	100% success rate within the base station
Working status of receiving information	Reply after receiving the refresh information, and reply after the refresh successfully
Identification	Radium carving MAC address
LBS	Beacon tag
LED	red

### Main CPU

parameter	Typical value
Dominant frequency	32 MHz
core	32bit RISC+ dual B0S1
RAM	20 KB
FLASH	256 KB
TX current	6.75 mA
RX current	16.5 mA
maximum power	2 dBm
encryption	AES-128
Idle current	0.9uA
sensitivity	-95dBm
Working frequency	2.4GHz-2.4835GHz
Sleep mode	Support remote wake-up
Networking mode	Star networking
location	Accuracy 1m (location beacon density 10m)

### Mechanical Dimensions

parameter	dimensions (L*W*H) mm	pixel	Display area (mm)	Battery(mAh)
2.13	77.5x37.7x15.63	250x122	23.7x48.55	1200

反面

### FCC Regulatory Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help
- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

WARNING: Cancer and Reproductive Harm  
www.P65Warnings.ca.gov.

### Disposal of our Old Device


- When the wheelee bin symbol is attached to a device, it means the device is covered by the European Directive 2012/19/EU.
- All electrical and electronic devices should be disposed of separately from normal household waste via designated collection points provided by government or local authorities.
- The correct disposal of electrical and electronic products will help protect the environment and human health.

### EU Declaration of Conformity (DoC)

Hereby, Nubia Technology Co., Ltd declares that this device is in conformity with the Radio Equipment Directive: 2014 / 53 / EU.

For the declaration of conformity, visit <http://www.nubia.com/en/support.php?7a=download>.

Manufacturer's EU Representative:  
Nubia Technology Spain S.L.  
Address : Calle Goya 15, 1ª-Planta, Madrid, 28001  
E-mail: support.eu@nubia.com



### EU certified frequency band:

Frequency band	Max. output power (dBm)
2.4GHz wireless frequency band	0.78dBm
2400-2480MHz	0.78dBm

Safety warning:  
The cooler's normal operating temperature is 0°C - 40°C. In order to ensure the normal cooler functions, do not use this cooler outside the temperature range.  
This device may be used in each EU member state.

### Declaration of RoHS 2.0 Compliance

We're determined to reduce the impact we have on the environment and take responsibility for the earth we live on. So this document allows us to formally declare that the WD1102, manufactured by Nubia Technology Co., Ltd, fully complies with the European Parliament's RoHS (Restriction of Hazardous Substances) 2.0 Directive 2011/65/EU, with respect to all the following substances:

(1) Lead (Pb)  
(2) Mercury (Hg)  
(3) Cadmium (Cd)  
(4) Hexavalent Chromium (Cr (VI))  
(5) Polybrominated biphenyl (PBB)  
(6) Polybrominated diphenyl ether (PBDE)  
(7) Di(2-ethylhexyl) phthalate(DEHP)  
(8) Dibutyl phthalate (DBP)  
(9) Benzyl butyl phthalate (BBP)  
(10) Diisobutyl phthalate(DIBP)

Our compliance is witnessed by written declaration from our suppliers. This confirms that any potential trace contamination levels of the substances listed above are below the maximum level set by EU 2011/65/EU, or are exempt due to their application.

The WD1102 manufactured by Nubia Technology Co., Ltd meets all the requirements of EU 2011/65/EU.

### FCC regulatory conformance:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference.  
(2) This device must accept any interference received, including interference that may cause undesired operation.

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### Warranty Provisions

Warranty period: The warranty period commences from the date of purchase. The product and other accessories carry a warranty period according to local regulations and policy. The date on the proof of purchase or any other valid voucher will be considered as the date of purchase. For more detailed warranty information, please consult your local dealer or visit Nubia official website: <http://www.nubia.com/en/>

### Non-Warranty Provisions

The warranty doesn't cover products which have been handled in any of the following cases:

- ◆ Products malfunctioned or damaged due to misuse, improper use, abuse, negligence, or any improper use not according to the user manual.
- ◆ Product repaired/replaced or altered by any person other than Nubia customer service center.
- ◆ Products malfunctioned or damaged due to natural calamity, force majeure, unpredictable accidents and any other factors beyond the control of Nubia Technology Co., Ltd.
- ◆ Product altered, converted, or exchanged to meet the requirements of local electrical conditions, safety standards and communication systems by any person other than Nubia service center.
- ◆ Product whose serial number or warranty sticker is missing, damaged, or altered.
- ◆ Products which expire the warranty period specified in warranty card if those provisions conflict with local laws and regulations, it is subject to the local regulation.



### RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### Warranty Card

#### Warranty information

Name \_\_\_\_\_

Purchase Date \_\_\_\_\_

Charger S/N \_\_\_\_\_

Battery S/N \_\_\_\_\_

Dealer \_\_\_\_\_

Dealer Tel. \_\_\_\_\_

**Notes**  
If the product does not contain charger or battery , you don't have to fill in the serial number.  
This certificate will become effective only after stamped by a dealer authorized by Nubia Technology Co., Ltd.

**Nubia Technology Co., Ltd.**  
Address: Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370, Liuxian Rd., Nanshan District, Shenzhen City, Guangdong Province, P. R. China  
Official website: [www.nubia.com/en/](http://www.nubia.com/en/)

技术要求:

- 1、 材质:105g黑色特种纸;
- 2、 工艺: 2专色印刷+过哑油
- 3、 成型: 5折页, 风琴折 12P 80\*114mm
- 4、 尺寸公差: ±1 mm。