正面

nubia

WD1102FI
ELECTRONIC SHELF LABEL

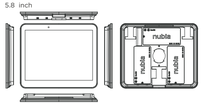
## Introduction

Electronic Shelf Label(ESL)is a price information display device of electronic and intelligent，Can be fixed on the shelf，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

5.8 inch

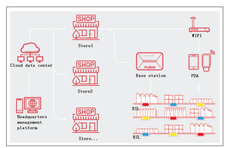



## Product features

●Connection mode: 2.4G wireless frequency band
●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,Waterproof, 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 | -25~60℃ | Display screen |
| Ice screen working temperature | -20~40℃（2.13inch） | Display screen |
| Waterproof grade | IP54 | |
| Endurance time | 5 years | Refresh 4 times a day |
| display technique | E-ink | |
| material | ABS+PC | |
| density | 0.226x0.227mm | |
| battery | CR2450 | 2pcs/group |
| Battery capacity | 600mAh×2 | |
| Encryption mode | AES-128 | |
| LED | RED | |
| Transmission frequency | 2.4GHz2.4835GHz | |
| 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 | IDPR | Vcc=3V | 2 | 2.4 | 2 | mA |
| Standby current | IDLE | Vcc=3V | | 0.63 | | uA |
| Wireless frequency | F | | | 2.4 | | GHz |

Working characteristics

| patameter | 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 8051 |
| RAM | 20 KB |
| FLASH | 256 KB |
| TX current | 6.75 mA |
| RX current | 16.5 mA |
| | |
| 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*T) mm | pixel | Display area (mm) | Battery(mAh) |
|---|---|---|---|---|
| 5.8 | 138x113x13 | 648x480 | 126x99 | 3600 |

## 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.

反面

## Disposal of our Old Device

• When the wheelie 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?a=download.

CE

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

## EU certified frequency band:

| Frequency band | Max. output power (dBm) |
|---|---|
| 2.4GHz wireless frequency band 2400-2480MHz | -1.8 dBm |

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 WD1102FI, 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 WD1102FI 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.
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
**NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

## 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 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 nunber 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 subject to the local regulation.

Qualified

## 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/

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。