Blozi Intelligent Technology-Introduction of ESL Electronic Price Label

Electronic Price Label introduction

Blozi ESL Electronic Price Label is a high-end electronic price tag independently developed and produced by Shanghai baozi Intelligent Technology Co., Ltd. based on 2.4G wireless communication technology and using electronic dot matrix screen, electronic segment code and LCD screen as the display part. It has many advantages, such as ultra-low power consumption, ultra-long service life, full view, high contrast and high stability. The price tag communication mode adopts the private communication protocol developed by the insurance company, which has high security, fast and stable connection. The asset protection electronic price tag adopts PCB on-board antenna to transmit and receive data, and uses one or more button batteries to supply power. It can be widely used in various supermarkets, shopping malls, storage systems, etc. At present, the main models include ENDOR series dot matrix ed0154, ed0213, ed0266, ed0290, ed0420, ed0750, ed1020, segment code ed0773, etc.

1.Electronic Price Label parameter

	ED0775	ED0420	ED0290冷冻屏	ED0290	ED0213	ED0154	ED0773
size	181.2*124.1mm	98.6*87.6mm	89.1*43.1mm	89.1*43.1mm	69.3*35.8mm	50.9*34.9mm	221.1*169.1mm
Color	Y / R /W	Y / R /W	W	Y / R /W	Y / R /W	Y / R /W	W
NFC	yes/Optional	yes/Optional	yes/Optional	yes/Optional	yes/Optional	yes/Optional	yes/Optional
LED	RGB	RGB	RGB	RGB	RGB	RGB	Not support
dpi	880*528	400*300	296*128	296*128	250*122	200*200	640*384
range	>20m	>20m	>20m	>20m	>20m	>20m	>20m
Life	5 year	5 year	5 year	5 year	5 year	5 year	5 year
Replaceable battery	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TMP	0~40℃	0~40℃	-25~10℃	0~40℃	0~40℃	0~40℃	0~40℃
Separate control	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QRCode	Yes	Yes	Yes	Yes	Yes	Yes	No
ID Location	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Front
InternationalProtection	ip54	ip67	ip67	ip54	ip54	ip54	ip54

2. Installation method

1.Gimbal：

Applicable to common laminates, fruit and vegetable areas and fruit and vegetable baskets

2.Swing table

Applicable to all countertops and multiple scenes3.

3.Guide:

Applicable to standard shelves, laminates, etc

4.hook

Suitable for t-hook, snack area, etc

Ice insertion
Applicable to freezing area

3.Function description

1.The price tag has led prompt function. Observing the change of LED color can judge the inventory of goods and other information.

2.The price tag has NFC function, which can quickly change the price and cut pages through the handheld terminal device or the mobile phone with NFC function (the mobile phone needs to download the blozi binding assistant APP).

3.The price tag has a 24-hour machine brushing function, which does not require the participation of the BTS. It can even be brushed offline. Used to prevent the price tag screen from being red (the current price tag template is used as the display template).

4.The price tag has the function of page cutting. It supports five types of templates in advance, and then uses short instructions to quickly switch.

5.The price tag improves the anti falling performance through precise structural design.

The price tag supports waterproof, dustproof and low temperature, and can be used in complex environments.

4.Principle description

The electronic price tag needs to be used in conjunction with the electronic price tag

system, including ESL server, base station, electronic price tag and intelligent handheld terminal equipment. The commodity information in the database is encoded by the ESL server, and then the price and other information to be updated is transmitted to the base station through Ethernet; The base station then sends the commodity data information to the whole store (the base station is usually arranged on the ceiling of the store and surrounds the whole store building, limiting the coverage of RF wireless signals to a specific enclosed space); The electronic price tag is a wireless data receiver with ID code, which can restore the received RF signal to an effective digital signal and display it.

The electronic shelf label system has two communication functions: point-to-point and group sending, that is, the server can not only transfer data to a specified label, but also control all labels at one time. Each electronic price tag stores multiple pieces of information of corresponding commodities, and the salesperson can easily query and check with the help of intelligent handheld terminal equipment. The shelf label is placed in a special installation strip fixed on the shelf, and can also be set in a variety of installation methods such as hanging type. The electronic price tag also supports remote control, and the headquarters can manage the unified price of commodities in its chain branches through the network. Multiple pieces of information of corresponding commodities are stored internally, and the salesperson can easily query and check with the help of intelligent handheld terminal equipment.

5. Technical indicators

Frequency	2402-2481 MHZ
channel	80, 1MHz difference between the two
Communication protocol	2.4G Proprietary,Not BLE Not Wifi
Power supply	Button battery / different models, with different number of batteries
Supply voltage	3-3.3V
Operating current	7-9mA
Sleep current	About 5uA
Ant	Sigal Pcb ANT
Gain	3db

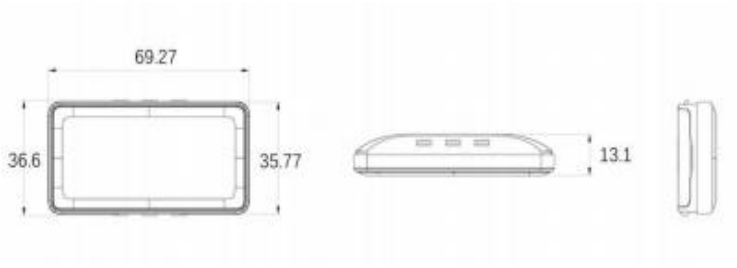
hardware system	Embedded system
Appearance	Each model is different in appearance
modulation mode	GFSK
Operating mode	After the battery is powered on, the price tag is always in sleep. When you wake up, you send it to the BTS, wait for the feedback from the BTS, and then sleep.

6. ANT（ED0213）

The basic parameters：

A. Electrical Characteristics	
Frequency	**2400 MHz ~2500 MHz**
VSWR	**< 2**
Efficiency	**>50%**
Impedance	**50 Ohm**
Polarization	**Linear**
Gain	**>-0.3dbi**
B. Material & Mechanical Characteristics	
Material of Radiator	**PCB yellow**
Cable Type	**Ø 1.13mm black**
Connector Type	
Dimension	
C. Environmental	
Operation Temperature	**-10 °C ~ + 50 °C**
Storage Temperature	**- 30 °C ~ + 85 °C**

7. Product show（ED0213）



parameter	unit	Details
Size	mm	69.3*36.6*13.1
screen size	mm	48.5*23.7
resolving power	pixel	250*122
DPI	DPI	130
Color	-	Red
Battery	-	CR2450 x2pc/1100mAh
Battery life	年	8year
TMP	℃	0~40℃
NFC	-	Support
frequency	-	2402~2481Hz

FCC Statement

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.
Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
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.
RF Exposure Information
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

ISED Statement

English:This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).
French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.
L'exploitation est soumise aux deux conditions suivantes :
(1) Cet appareil ne doit pas provoquer d'interférences.
(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.
l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).
This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

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

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.
RF Exposure Statement

The device has been evaluated to meet general RF exposure requirement. This equipment should be installed and operated with minimum distance 0mm between the radiator & your body.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. Cet équipement doit être installé et utilisé avec une distance minimale de 0 mm entre le radiateur et votre corps.