

IVF-BT11-2 Colorful Finder Label

Product specifications

●2021 Xiamen Innoer Information reserves all rights to this file.

The actual company and product names mentioned in this article are their respective labels.

No part of this document may be reproduced, stored in any retrieval system, or thereof

Any transmission without the written consent of Innoll Information.

This document will be updated and notified separately.

directory

1.	Product overview	3
2.	Product features	3
3.	Product specifications	3
4.	System application block diagram	4
5.	Product power consumption	5
6.	Product reliability experiments	7
7.	agreement	8
8.	Notes	9
9.	Environmental instructions	9
10.	Warranty Service Terms	9
11.	Product Discontinuance Notice Description	12
12.	Contact	12

1. Product overview

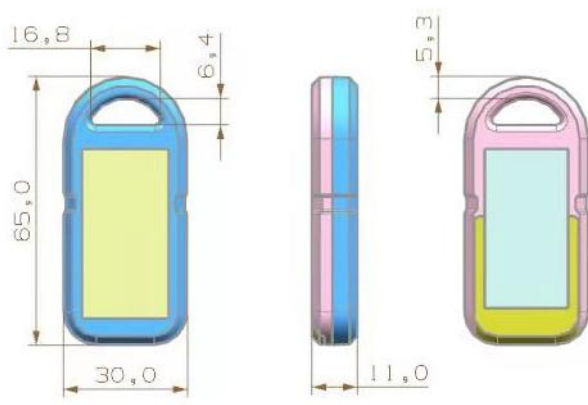
IVF-BT11-2 Finder Tag is a 2.4G custom electronic tag with colorful light reminder, with 6 colors, 12 lights, transparent shell, high brightness, It can quickly find objects in item management (the sought items have a luminous prompt), which is suitable for the picking of goods and Chinese herbal medicines at rookie stations, and the search for objects in supermarket warehouses, and experiments Sample search and other application fields.

2. Product features

Product application design

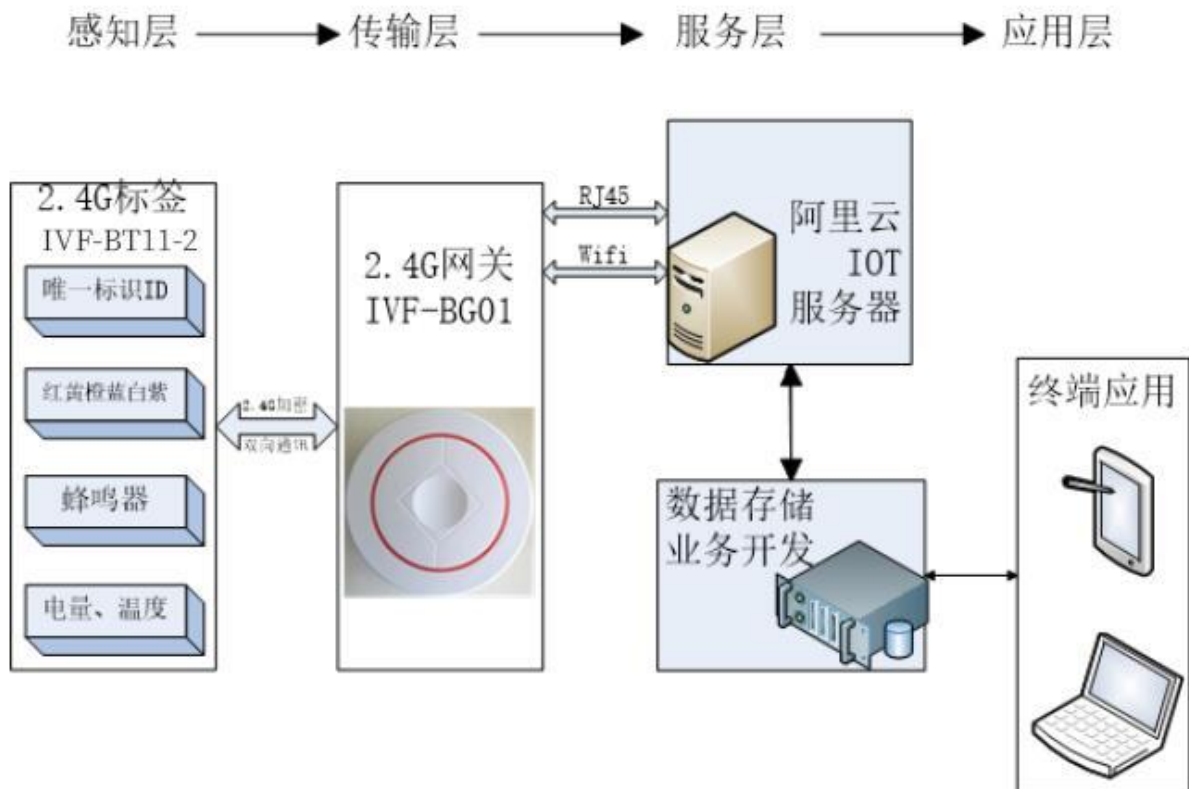
- ◆ 2.4G low-power design, standby power consumption: 47.5uA;
- ◆ With transparent shell, a variety of colors are clearly visible
- ◆ Using special sealing, waterproof grade up to IP65;
- ◆ The surface can be pasted with two-dimensional code, MAC address, etc.;
- ◆ Overall weight 20.2 grams;
- ◆ Low temperature resistant button battery, capacity 1000mA can work for 28 months (more than 20 times a day (5 seconds each time), will reduce the life of the battery);
- ◆ The battery can be replaced;

3. Product specifications

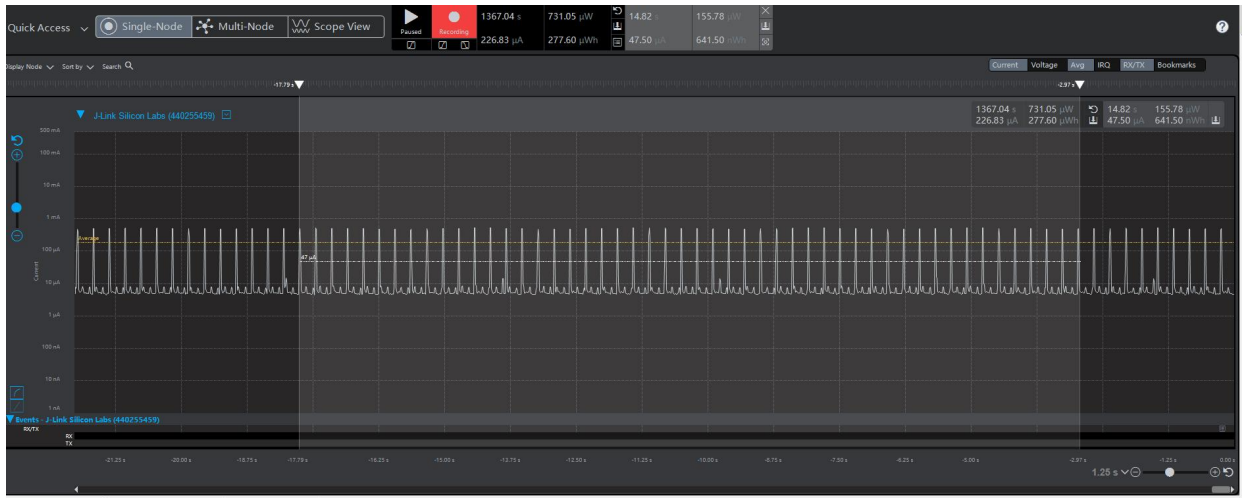
Product name	2.4G colorful object tag
Product model	IVF-BT11-2
Product size	65(W)*30(W)*11mm(H) 

Product weight	20.2g
battery	CR2477
Communication protocol	AES encryption is private
Frequency	2.4035GHz
Transmit power	Default 10dBm
encapsulation	Special sealant
Housing material	PC
Communication range	20-50m (depending on environmental conditions).
working hours	28 months (battery life is calculated according to the frequency of customer lighting).
Storage temperature	0~65°C
color	White transparent (customizable)

4. System application block diagram



5. Product power consumption



Standby power consumption	47.5uA
The purple light is on for 5 seconds	7.92mA
The red light is on for 5 seconds	9.3mA
The orange light is on for 5 seconds	9.7mA
The blue light is on for 5 seconds	7.5 mA
The yellow light is on for 5 seconds	9.34 mA
The white light is on for 5 seconds	7.8 mA
Fully on for 5 seconds	19.5 mA

Example: Suppose the red light is lit 20 times a day for 5 seconds each time, and its life calculation method is as follows

Daily standby power consumption: $47.5\mu A * 24h = 1140\mu A$

Daily power consumption: $6.7mA * (5 * 20 / 3600)h = 186\mu A$

Battery life: $1000\text{mA}/(1140+186)\mu\text{A}=754$ days

6. Product reliability experiments

serial number	Pilot project	Test standards	Test results
1	50°C high temperature operation test	Set the high and low temperature test chamber, the temperature is set to 50 °C, when it reaches 50 °C, the product is turned on and put into the test chamber, and connected to the power supply to charge, the label is placed on the BU01 product, and the continuous operation is read for 24 hours.	After the end of the test, after placing the equipment at room temperature for 3 hours, the detection equipment reads the tag normally, the reading distance is normal, and the structure is not damaged.
2	-20°C cryogenic storage test	Set the high and low temperature test chamber, the temperature is set to -20 °C, the humidity is set to 80%, and when the set value is reached, the product is placed in the test chamber to start timing, and the low temperature operation is continuously run for 24 hours.	After the test, after the equipment was placed at room temperature for 3 hours, the function was normal and the structure was not damaged.
3	70°C high temperature storage test	Set the high and low temperature test chamber, the temperature is set to 70 °C, when the set value is reached, the product is placed in the test chamber to start timing, and the low temperature operation is continuously run for 24 hours.	After the test, after the equipment was placed at room temperature for 3 hours, the function was normal and the structure was not damaged.
4	Bare metal drop test	The front and back sides of the product and all four sides are freely dropped on the concrete floor from a distance of 1.5 meters. Each face is dropped 2 times, and it is necessary to check whether the product structure is damaged and whether the product function is invalid	After the test, there was no power failure and re-start, the functional test was normal, and the shell did not crack, and the test was qualified.

5	Packaging simulation transport vibration test	Test speed setting: 300CPM, corresponding frequency: 5Hz, the product is fixed on the vibration table after packaging, and the vibration time is 48H.	After the test, there was no re-boot phenomenon of the product, the functional test was normal, and the test was qualified
---	---	---	--

7. agreement

This protocol is intended for users who want to develop their own platform by their R&D team if you want to get this product

Yes, please contact our sales team. This agreement can only be disclosed after the confidentiality agreement is signed and the order is placed, if the user does not want (or cannot) sign the confidentiality agreement, then only use a third-party platform or product, please consider carefully.

8. Notes

In order to use this product safely and effectively, please read the following before use.

- It is strictly forbidden for non-professionals to disassemble the shell to prevent product damage.
- The product contains batteries, it is strictly forbidden to put into fire and use in flammable and explosive environments to prevent battery explosion.

9. Environmental instructions

◆ Do not put waste batteries together with general household waste, in areas where there are corresponding regulations for the disposal of used batteries, please follow the relevant regulations of the local management department and contribute to environmental protection.



10. Warranty Service Terms

1. Warranty service scope

- Warranty Products:

In order to comply with the relevant laws and regulations of the People's Republic of China and related administrative rules, this warranty service is a limited warranty and is only applicable to

Products sold by Xiamen Innoer Information Technology Co., Ltd. (hereinafter referred to as Innoer) or authorized distributors.

- Warranty period:

The product is covered by warranty for failure under normal use during the following period from the date of purchase from the date of shipment

If the customer has a warranty service request, he or she needs to provide the purchase contract, receipt list, SN number of the faulty machine, and fault question

Description, proving that the product is covered by a warranty of one year from the date of purchase from the date of shipment.

- Non-warranty coverage:

- a. Failure to provide valid purchase contracts, receipt documents or certificates (including the content of purchase contracts and receipt documents

Alteration, or inconsistency with the actual product, etc.)

- b. Surface damage such as scratches, dents or depressions.

- c. Batteries and other consumables, except for product damage caused by defects in materials or workmanship.

- d. Due to accident, abuse, misuse, fire or other natural disasters or due to improper use or unreasonable maintenance by oneself

Damage caused by maintenance (including damage caused by external forces)

- e. Overhaul, modification or alteration by non-Innoer-authorized service personnel may cause permanent damage to the product.

2. Description

- This warranty provides you with specific legal rights, but its rights may vary depending on the norms of each country, and the laws of each country

Innoer does not exclude, limit or suspend any other legal rights set forth herein, so the following sections are limited to you

Yes or not.

- To the extent permitted by law, this warranty is exclusive and supersedes all other express or implied or

Warranty conditions under the Act, including for a particular purpose, as provided by the Act, or in any other circumstances, including but not limited to property

Any liability arising from the merchantability or fitness for a particular purpose. Also, for any accidental, special, indirect

or derivative damages, for which Innoer will not be liable (which may result from use, misuse, non-use or product defects).

- Innoer reserves the right to reject warranty applications for products or services obtained and/or used in violation of the laws of any country

Sharp.

- Products sold through auction websites or other non-Innoer or authorized dealers do not fall under this warranty

The scope covered by the service.

- If the product is not covered by warranty after testing, Innoer will maintain it after obtaining the consent of the customer and charging the quotation

Repair, for repaired faults, Innoer provides a warranty for the same functional failure within 90 days.

- Innoer reserves the right to repair/replace the product or software. Innoer will use original spare parts according to standard procedures

Maintenance; In the case of impossible maintenance, some products are repaired by module replacement or complete machine replacement. If you meet the dimension

In the event of a shortage of repaired parts or the discontinuation of the product, the same product of equal value will be provided during the warranty period according to the depreciation of the product.

or provide upgrades with the consent of the customer and charge the price difference; Outside the warranty period, no repair service is provided. Replaced

Faulty parts, owned by Innoer.

3. Precautions

- Before customers apply for product warranty, back up all important personal data in advance, and only provide products that need to be guaranteed. at

During the repair process, the data in the product may disappear and cannot be recovered, and Innoer does not provide data backup

Nor is there any guarantee of consistency of the relevant settings before and after repair.

11. Product Discontinuance Notice Description

◆First of all, thank you very much dear customer, for your long-term patronage of Xiamen Innuoer Information Technology Co., Ltd. products

Support, Innoer would like to express his most heartfelt thanks! It may be due to the spare parts supplier model upgrade or discontinuation, or public

In order to better adapt to the development of the market and technology in order to provide you with better products or services, the company may be on production

The product will be upgraded normally, so the original old model of the product will be discontinued, and Innoer will be one year ahead of schedule before the discontinuation

Occasionally issue a stoppage of production covers, notify Innoer's customers by email, force majeure (such as natural disasters, chip crisis,

Epidemic and other factors) are excluded.

12. Contact

Email: sales@rfidtagworld.com

Phone:+8613606915775

Address: Xiamen Torch High-tech Zone (Xiang'an) Industrial Zone, No. 943, Tonglong 2nd Road, Innoer Internet of Things Industrial Park

Frequently Asked Questions and Answers:

1. How many lights (concurrent) can be supported	The server issues 40 illuminated labels at a time, if there are more than 40, the server must separate the instructions twice, or arrange multiple gateways to achieve more concurrency.
2. What is the farthest luminous distance?	The unobstructed distance between the gateway and the label is 20~50 meters, and the visual distance of the label light is 10~30 meters (yellow light, red strong).
3. Does multi-label luminescence affect the reading distance?	The reading distance of the label is mainly affected by the environment, and has nothing to do with the amount of the label.
4. How long does it take to light a lamp; How much power is consumed?	On average, a lamp is lit at 330mS, standby power consumption is 48uA, and lamp power consumption is about 10mA
5. How to calculate the battery life, is it according to the number of lights?	It can be based on standby power consumption * time + lighting power consumption * lighting duration
6. What should I do if the leakage is lit?	If the light is successful, it will feedback to the server, and if it is not successful, the server will resend the unsuccessful light.