UT-241-E Tag

Introduction

CyraSecurity UT-241-E is a displayable card-type positioning tag developed based on UWB technology. It is equipped with BLE and six-axis sensor-assisted positioning and supports two positioning methods: TDoA and ToF. It can be worn as an employee's work badge and is widely used for personnel positioning in various fields;

UT-241-E is equipped with a 1.54-inch high-resolution screen with a viewing angle close to 180°. It supports information display and can be used to send reminder messages using short phrases.

UT-241-E is optionally equipped with RFID and supports access control cards, personnel information management and other functions；

The protection level of UT-241-E reaches IP65, which meets the protection requirements for use in industrial scenarios.

Main Features

- **Based IEEE 802.15.4a UWB**
  - Nanosecond-level pulse signals achieve centimeter-level positioning accuracy

- **BLE 5.0**

  - Assisted positioning to achieve Bluetooth positioning

- **SOS Button**

  - Active alarm and call for help with OneClick

- **Vibration and Buzzing**

  - The platform issues alarms, vibrates, beeps, and provides multiple alarm reminders.

- **High-Resolution Screen**

  - Time, step count, and short messages are displayed

- **RFID**

  - ISO 14443A 13.56MHz IC card，Supports access control management and other functions

Product

UT-241-E Tag

Product Specifications

Item	Description	
Overview		
Product Model	UT-241-E	
Related Specifications	IEEE 802.15.4a	
	IEEE 802.15.1	
Charging Interface	4pin Magnetic charging	
Charging Voltage	DC 5V	
Instantaneous Power Consumption	< 1W	
Standby Time [1]	> 1 Month	
Refresh Rate	0.1~20 Hz (Adjustable)	
Light Display Status	Charging	Blue (flashing)
	Full Charged	Blue (steady)
	Battery low (working)	Red (flashing)
	Normal power (working)	Green (flashing)
RF Specifications (UWB)		
Working Frequency Band	3.24GHz~3.74GHz（channel1）	
	3.77GHz~4.24GHz（channel2）	
	6.24GHz~6.74GHz（channel5）	

	110 kbps
Speed Rate	850 kbps
	6.8 Mbps
Output Power (25℃)	-41.3dBm/MHz (Typical value)
	-13dBm/MHz (Maximum value)
Channel Bandwidth	500MHz
Antenna Gain	0.5 dBi

RF Specification (BLE)

Working Frequency Band	2.4GHz~2.4835GHz
Speed Rate	1Mbps
Output Power (25℃)	0dBm (Typical value)
Antenna Gain	1.39 dBi

Screen

Size	1.54 inch
Color	Black and White
Resolution	200×200 dpi
Refresh	Support partial refresh
Show Content	SMS notification, time, step count, battery
Supported	Simplified Chinese, Traditional Chinese,

Language	English

Software Specifications

UWB Mode	TDoA
	ToF
Hibernate Mode	SmartSleep®
Alarm Upload	SOS Active alarm
	Low battery warning
	Fall warning
	Extremely long inactivity alarm
Alarm Issuance	Vibration (prompt, alarm, strong alarm)
	Buzzer (prompt, alarm, strong alarm)
	Screen display
Upgrade	UART，OTA
Configuration	UART Interface，CLI Configuration

Physical Specifications

Dimensions (mm)	57×87.5×7
Weight (grams)	38

Environmental Specifications

Temperature	Working Temperature	-20℃~60℃
	Storage Temperature	-30℃~70℃
Temperature	Humidity	5%~95%　Without

	condensation
Waterproof and Dustproof	IP65
Flame Retardant Grade	UL94 V-0
RoHs	Compatible

Delivery Content

Name	Description	Quantity	Part number
UT-241-E	Tag	1	AA01UT241E00
Magnetic Charging Cable	4pin magnetic charging cable, 800mm	1	Nil