

UT-241-C Tag

Introduction

CyraSecurity UT-241-C is a card-type positioning tag developed based on UWB technology. It supports TDoA and ToF high-precision positioning and is equipped with BLE assisted positioning. Supports proactive sending of SOS alarms, low battery alarms, and long-term inactive alarms, and supports vibration and buzzer prompts when issuing alarms.

UT-241-C can be worn as an employee's work badge or used as an armband. It supports access control cards to implement personnel information management and other functions. The product protection level reaches IP67 and the explosion-proof level is Exib IIC T6 Gb. It can be widely used for personnel positioning in various fields of industry, electric power, energy, data center and construction sites.

Main Features

- **Based on 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.
- **Protection Level**
 - Better protection level and strong environmental adaptability
- **RFID**
 - ISO 14443A 13.56MHz IC card , Supports access control management and other functions

Product



UT-241-C Tag

Product Specifications

Item	Description
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Overview

Product Model	UT-241-C	
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 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)
Speed Rate	110 kbps
	850 kbps
	6.8 Mbps
Output Power (25°C)	-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°C)	0dBm (Typical value)
Antenna Gain	1.39 dBi

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)
Upgrade	UART, OTA
Configuration	UART Interface, CLI Configuration

Physical Specifications

Dimensions (mm)	57×87.5×7
Weight (grams)	36

Environmental Specifications

Temperature	Working Temperature	-20°C~60°C
	Storage Temperature	-30°C~70°C
Temperature	Humidity	5%~95% Without condensation
Waterproof and Dustproof	IP67	
Flame Retardant Grade	UL94 V-0	
RoHs	Compatible	

Delivery Content

Name	Description	Quantity	Part number
UT-241-C	Tag	1	AA01UT241C00
Magnetic Charging Cable	4pin magnetic charging cable, 600mm (+/-30mm)	1	Nil