

UT-241-C Data Sheet

1 Introduction

UT-241-C is a card-type positioning tag developed by Woxu wireless Co., Ltd. based on UWB technology. It is equipped with BLE, six-axis sensors, etc., and supports TDoA and ToF positioning. Supports active sending of SOS alarms, low battery alarms, and different alarms of long periods of inactivity. The issuing alarms are equipped with vibration and buzzer prompts.

UT-241-C is equipped with RFID, supports key card, personnel information management and other functions;

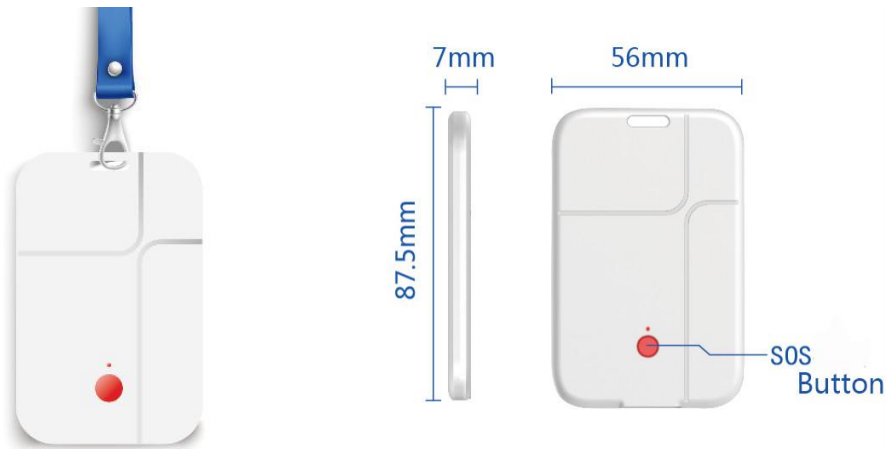
UT-241-C product protection grade reaches IP67, meeting the needs of various industrial environments;

UT-241-C can be worn as an employee's work badge or used as an armband, which is widely used for personnel positioning in various fields.

2 Main feature

- IEEE 802.15.4a UWB wireless
- BLE 5.0
- SOS button
- Vibration, buzz alert
- IP67 protection level
- RFID (adjustable)

3 Product picture



4 Specification

Item	Description	
Overview		
Model	UT-241-C	
Specification	IEEE 802.15.4a	
	IEEE 802.15.1	
Chargeable interface	4pin Magnetic attraction	
Charge voltage	DC 5V	
Instantaneous power	< 1W	
Stanby time	> one month	
Refresh rate	0.1~20Hz (adjustable)	
LED	Charging	Blue Blink
	Fully charged	Blue light

	Low battery (working)	Red Blink
	Normal battery (working)	Green Blink

RF Spec. (UWB)

Frequency Range	3.25GHz~3.74GHz (channel1)
	3.77GHz~4.24GHz (channel2)
	6.24GHz~6.74GHz (channel5)
Physical Rate	110 Kbps
	850 Kbps
	6.8 Mbps
Output power(25°C)	-41.3dBm/MHz (typical)
Channel bandwidth	500MHz
Antenna gain	0.5 dBi

RF specification (BLE)

Working frequency	2.4GHz~2.4835GHz
Physical rate	2Mbps
Output power (25°C)	4dBm (maximum)
Antenna gain	1.39 dBi

Software specification

Operating mode	TDoA
	ToF
Sleep mode	Smart mode

Alarm upload	SOS button
	Low battery alert
	Inactivity for long period
Alarm issuance	vibration (prompt、alarm、strong warning)
	Buzzer (prompt、alarm、strong warning)
升级	UART, OTA (UWB o BLE)
配置	UART interface, CLI configuration

Physical Spec.

Dimensions (mm)	57×87.5×7
weight(g)	36

Environmental Spec.

Temperature	Operating : -20°C~60°C
	Storage : -30°C~70°C
Humidity	Operating : 10%~90% non condensing
RoHs	Compatible

5 Delivery content

Model	Specification	Quantity	Order number
UT-241- C	Card positioning label	1	AA01UT241C00
Magnetic charging cable	4pin magnetic charging cable, 800mm	1	/

Accessory (not including in the scope delivery, if you have any requirements, please contact WOXU in advance)

Model	Specification	Order number
Power adapter	5V, 1A power adapter	AD0203100001
Card cover	PVC, 105×90mm	AD1201010500