



Datasheet

UT-230

Version: Draft V1.0

Version	Date	Update Record	
Draft V1.0	2017.10.24	First time	Mr. Zhu
Draft V1.1	2018.02.22	Update	Mr. Zhu

Description

UT-230 is a kind of assets TAG developed by Nanjing Woxu Wireless based on UWB technology, the TAG include UWB、BLE which will be used in all kinds of industrial field widely. The TAG adopted battery supply. The product has voice and Photoelectricity, when your location system is in the search mode, LED of the TAG will be twinkle, buzzer will work.

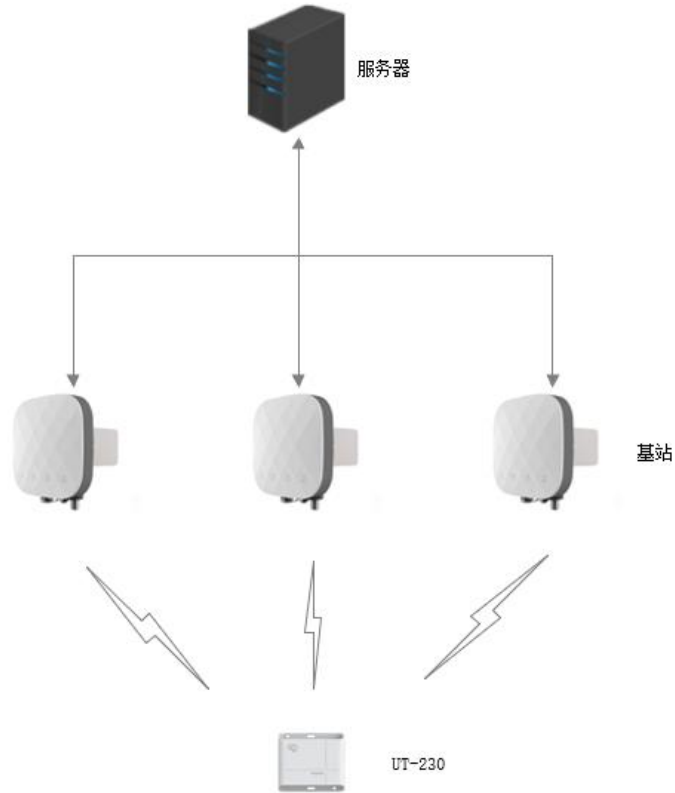
Main Feature:

- 802.15.4a UWB
- Bluetooth 4.0
- High precision, ranging data can reach 5cm. (Standard deviation)
- High power, in line of sight, can transmit more than 100m
- Built-in board antenna
- Non-rechargeable battery.

Photo:

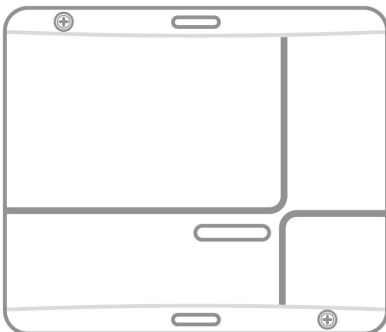


1 Application architecture

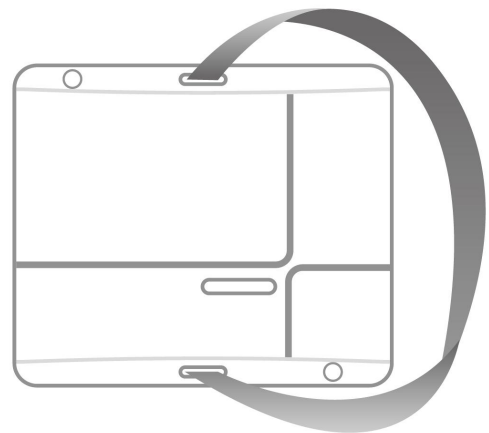


2 How to fix

Screw:



Ribbon:



Specification

Item	Description		
Outline			
Product name	UT-230		
Standard	802.15.4a		
Instantaneous power consumption	<1W		
Battery capacity	Lithium manganese battery :2400mAh		
Refresh rate	0.01~100Hz (adjustable)		
LED status	Green LED	UWB working: twinkle	
	LED	On line or off line	Red and green alternately flicker for 2 seconds
		Low quantity of electricity (working)	Red twinkle
		Normal electricity (working)	Green twinkle

RF Specific (UWB)

Working frequency	3.25GHz ~6.75GHz (Channel 1/2/3/5)		
Physical rate	110 Kbps		
	850 Kbps		
	6.8 Mbps		
Output power (25°C)	-21dBm/MHz		
Channel frequency width	500MHz		
Antenna gain	1.0 dBi		

BLE 4.0

Working frequency	2400 ~ 2483.5 MHz		
Physical rate	3Mbps		
Output power (25°C)	0.01 mW (-20 dBm) ~ 10 mW (+10 dBm)		
Antenna gain	1.5 dBi		

Software specification

UWB working mode	TDoA		
	TOF		

UWB effective distance	> 100 m@6.8Mbps without any obstacle
Ranging precision	5cm (standard deviation with 10 thousand times)
dormancy	Smart dormancy
Warning upload	Low quantity of electricity warning
Warning download	Intense light, buzzer
configuration	UART, CLI

Physical specification

Size (mm)	64.2×56.4×25
Weight (g)	57

Circumstance

Temperature	Working : -20°C~65°C Storage : -30°C~75°C
Humidity	Working : 0%~90% No condensation Storage : 0%~90% No condensation
Water proof	IP67
RoHs	Compatible

3 交付内容

Model	Specification	Quantity	Order number
UT-230	Asset Tag	1	AA01UT230P00