



The UT-329 Smartwatch



brief introduction

UT-329 is a smart watch designed by Nanjing Wexu Communication Technology Co., Ltd. based on ultra-broadband (UWB) technology. It supports high-precision positioning of TDoA, ToF and AoA, and is equipped with BLE and three-axis accelerometer to assist positioning.

The UT-329 supports the monitoring of heart rate, temperature, blood oxygen and other signs. It is equipped with a 1.45-inch full-touch display for the display of power, time, signs, alarms and other information. The UT-329 is equipped with a motor that supports SOS active alarm, fall alarm, alarm and other incidents.

UT-329 supports wristband wear, product protection level IP67, can be widely used in industry 4.0, factories, government and enterprise pavilions and judicial fields.

leading feature

- **Based on the IEEE 802.15.4z UWB**

-Ultra-broadband nanosecond level pulse signal to achieve centimeter-level positioning accuracy

- **Suitable for a wide range of areas**

-High-band (CH 5 / CH 9) design to support global application

- **Ultra low power consumption**

-Intelligent dormancy, ultra-low power design

- **Light and convenient**

-Small size design, easy to carry and move

- **levels of protection**

-IP 67 protection level, for better environmental adaptability

- **SOS key**

-Active alarm, a one-key call for help

- **report an emergency**

-Support active alarm reporting and accompanying vibration warning

-The platform issues emergency notification information, screen warning and vibration alarm reminder (support interface docking with the customer platform)

- **Signal monitoring**

- Support heart rate, blood oxygen saturation, body temperature measurement, all-weather intelligent physical signs monitoring

- **BLE 5.1**

-Assist positioning to achieve Bluetooth location fusion

- **Full touch display**

-Time, power, physical signs, step counting, short message, etc., Chinese and English display, full color touch screen simple operation

product picture



The UT-329 smart smartwatch

size of product

project	description
summary	
product model	UT- 32 9
Related	IEEE 802.15.4z
specifications	IEEE 802.15.1
USB	2 pin magnetic suction charging
charging voltage	DC 5 V
Instantaneous power consumption	< 1 W
The standby time is	> 1 Month

1		
refresh rate	0.1-20 Hz (adjustable)	
key	Wake up, out of the screen	Point press
	SOS report an emergency	After 3s of long press
	starting up	After 5s of long press
	restart	Touch screen restart
	shut down	Touch screen turned off

RF Specification (UWB)

Work frequency band	6.24 GHz~6.73 GHz (channel 5)
	7.74 GHz~8.23 GHz (channel 9)
Physical rate	850 Kbps
	6.8 Mbps
Output power (25°C)	-41 dBm / MHz (typical value), with adjustable power
channel width	≥500 MHz

RF Specification (BLE)

Work frequency band	2.4 GHz~2.4835 GHz
Physical rate	1 Mbps
Output power (25°C)	0 dBm (typical value)

Display specifications

type	LCD
Size (inch)	1.45
Resolution (Pixel)	240×240 (RGB)
touch control	Full touch
Display content	UWB status, time, power, heart rate, body temperature, blood oxygen, step counting, message
display language	Simplified Chinese and English

Software specifications

UWB work pattern	TDoA/ To F/ AoA
dormancy	Intelligent dormancy
Alarm upload	SOS active alarm
	Low power alarm
	Fall alarm
	Very long time stationary alarm
	Anti-collision range detection of active alarm
Warning issued	Vibration (prompt, alarm, strong alarm)
	The LCD displays the emergency notification information (the manufacturer needs to provide the docking interface)
Interface	Slide the touch screen left and right

switching	
Signal monitoring ² (Optional function)	Heart rate, blood oxygen saturation, and body temperature were actively measured
	Heart rate, blood oxygen saturation, and body temperature cycle monitoring
Exercise volume management (optional function)	Step count and progress display (zero at 0 points / day)
Auxiliary positioning (optional function)	Auxiliary positioning is realized by BLE and three-axis acceleration sensor
Message management	Store up to 10 messages
set up	Language switching
	Product information display
	shut down
upgrade	OTA
configure	BLE configure

Physical specifications

Watch size (mm)	42mm×35mm×13mm
Tape size ³ (millimetre)	Support 200mm wrist circumference, 3mm thick
Weight (gram)	38 (including the watch strap)

environmental specification

temperature	working temperature	-20℃~65℃
	Storage temperature ⁴	-25℃~65℃
humidity	Working humidity	5%~95% without condensation
Waterproof and dustproof 5	IP67	
Fire retardant grade	UL94 V-0	
RoHs	compatible	
closeRegularity	EMC	GB / T 17626-2 IEC 61000-4 grade 3 Class A
	SRRC	The Ministry of Industry and Information Technology has no [20 08] 354 standard

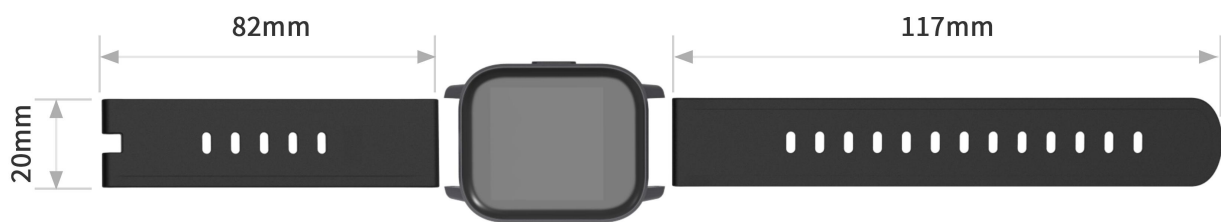
1. Standby time: the data comes from Nanjing Woxu Laboratory. The actual battery life time is different depending on the users usage habits, please refer to the actual usage situation.(Typical usage scenarios: UWB working mode TOF, working frequency band CH 5, refresh rate 1Hz, working 10 hours a day, bright screen 100 times a day, and heart rate cycle monitoring).

Products containing rechargeable batteries need to be charged once every 6 months, stored with about 80% of the power, or charging maintenance for 50% of the estimated time of the original full charge.

2. Signs monitoring: Blood oxygen saturation (SpO₂) refers to the percentage of the combined volume of oxygen and hemoglobin in the blood to the total hemoglobin volume, that is, the concentration of blood oxygen in the blood. This product is not a medical device, and the health data and suggestions provided are for reference only and are not used as the basis for diagnosis and

treatment;

3. The strap length is shown below:



4. Storage temperature: the product is stored in this temperature range, and the positioning tag will not be damaged, but the recommended storage temperature is 0~45°C for the long battery life;

5. It meets the standard protection level of GB / T 4208-2017, and meets the contact protection in daily and work scenarios. It is not suitable for snorkeling, hot shower, hot spring, sauna (steam room), diving, diving, water skiing, other wading activities and deep-water activities. Waterresistance is not permanent, and protective performance may decrease due to increasing wear.

Delivery content

name	Specification brief	quantity	number of order
UT-3 2 9	Smartwatch	1	A A 0 1 UT329000
Magnetic suction charging line	2pin, 630mm long, white in color	1	AE0803630000

Option (not included in the delivery scope, please contact Warbusiness in advance)

name	Specification brief	number of order
/	/	/

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