

UT-329 Smart Watch

Introduction

CyraSecurity UT-329 is a smart watch designed based on ultra-wideband (UWB) technology. It supports TDoA, ToF, and AoA high-precision positioning, and is equipped with BLE and three-axis accelerometer-assisted positioning. UT-329 supports heart rate, body temperature, blood oxygen and other physical signs monitoring, and is equipped with a 1.45-inch full-touch display that supports battery, time, physical signs, alarms and other information display. UT-329 is equipped with a motor and supports SOS active alarm, fall alarm, and alarm issuing. UT-329 supports wrist-band wear, and the product protection level is IP67. It can be widely used in various fields such as Industry 4.0, factories, government and enterprise exhibition halls, data center and prison.

Main Features

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

- **Wide Application Area**
 - High-band (CH5/CH9) design to support global applications
- **Ultra-Low Power Consumption**
 - Intelligent sleep mode, ultra-low power consumption design
- **Lightweight and Convenient**
 - Compact design, easy to wear and moving around
- **Protection Level**
 - IP67 protection level, better environmental adaptability
- **SOS Button**
 - Active alarm and call for help with OneClick
- **Alarm**
 - -Support anti-collision ranging and actively report alarms with vibration prompts
 - -The platform issues emergency notification information, screen warnings and vibration alarm reminders (supports plug-in interface with customer platforms, eg. ISMS)
- **Monitoring**
 - Supports heart rate, blood oxygen saturation, body temperature measurement, and all-weather intelligent physical sign monitoring
- **BLE 5.1**
 - Assisted positioning to achieve Bluetooth positioning

integration

- **Full Touch Display**

- Time, battery, physical signs, step counting, short messages, etc., full-color touch screen for simple operation

Product



UT-329 Smart Watch

Product Specifications

Item	Description
Overview	
Product Model	UT-329
Related	IEEE 802.15.4z
Specifications	IEEE 802.15.1

Charging Interface	2 pin Magnetic charging	
Charging Voltage	DC 5 V	
Instantaneous Power Consumption	< 1 W	
Standby Time	> 1 Month	
Refresh Rate	0.1~20 Hz (Adjustable)	
Button	Wake up, turn off the screen	OneClick
	SOS Alarm	Press for 3 seconds
	Turn On	Press for 5 seconds
	Restart	OneTouch
	Turn Off	OneTouch

RF Specifications (UWB)

Working Frequency Band	6.24 GHz~6.73 GHz (channel 5)
	7.74 GHz~8.23 GHz (channel 9)
Speed Rate	850 Kbps
	6.8 Mbps
Output Power (25°C)	≤-41 dBm/MHz (Typical value), power adjustable

Channel	≥500 MHz
Bandwidth	

RF Specification (BLE)

Working Frequency Band	2.4 GHz~2.4835 GHz
Speed Rate	1 Mbps
Output Power (25°C)	0 dBm (Typical value)

Display Specifications

Screen Type	LCD
Dimensions (Inches)	1.45
Resolution (Pixels)	240×240 (RGB)
Touch	Full touch screen
Content Display	UWB status, time, battery, heart rate, body temperature, blood oxygen, step counting, messages
Language Support	Simplified Chinese, English

Software Specifications

UWB Mode	TDoA/ToF/AoA
Hibernate Mode	SmartSleep®
Alarm Upload	SOS Active alarm

	Low battery warning
	Fall warning
	Extremely long inactivity alarm
	Anti-collision ranging active alarm
Alarm Issuance	Vibration (prompt, alarm, strong alarm)
	LCD displays emergency notification information (manufacturer needs to provide connection interface)
Interface Switching	Swipe left or right on the touch screen
Physical Sign Monitoring (Optional Function)	Active measurement of heart rate, blood oxygen saturation, and body temperature
	Cycle monitoring of heart rate, blood oxygen saturation and body temperature
Exercise Volume Management (Optional Function)	Display of steps and achievement progress (cleared at 0:00 every day)
Assisted positioning (optional function)	Assisted positioning through BLE and three-axis acceleration sensors

Message Management	Store up to 10 messages
Set Up	Language Selection
	Product information display
	Turn Off
Upgrade	OTA
Configuration	BLE configuration

Physical Specifications

Dimensions (mm)	42mm×35mm×13mm
Strap Size (mm)	Supports 200mm wrist circumference, 3mm thick
Weight (grams)	38 (including strap)

Environmental Specifications

Temperature	Working Temperature	-20°C~65°C
	Storage Temperature	-25°C~65°C
Temperature	Humidity	5%~95% With no condensation
Waterproof and Dustproof	IP67	
Flame Retardant Grade	UL94 V-0	

RoHs	Compatible	
Compliance	EMC	GB/T 17626-2 IEC 61000-4 Level 3 Class A
	SRR C	Technology No [2008] No. 354 standard

Delivery Content

Name	Description	Quantity	Part number
UT-329	Smart Watch	1	AA01UT329000
Magnetic Charging Cable	2pin, length 630mm	1	AE0803630000