UbiTrack UWB RTLS
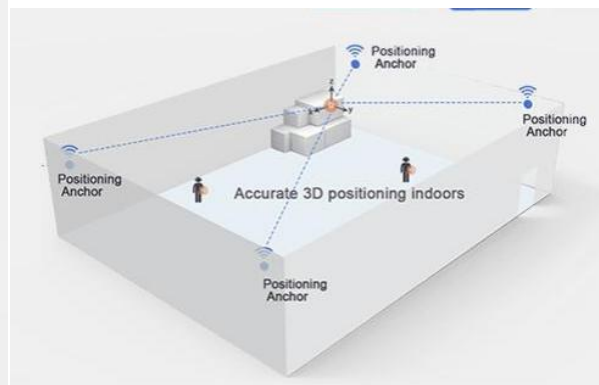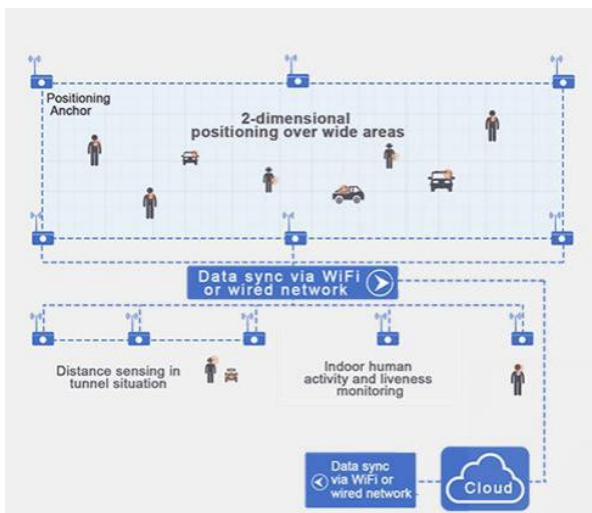
UbiTrack® is an integrated multi-dimensional indoor positioning solution, featuring high accuracy, flexibility and low cost.The system enables access to functions such as real-time positioning, tracking playback, high-speed camera linkage, accurate face recognition, electronic fence alarm and so on. Configuration and deployment takes just four steps: deploying the positioning anchors, configuring the software, uploading the floor plan, and setting up the positioning tags.

The products include positioning anchors and positioning tags (customisable form). The centimetre-level positioning standard is achieved by combining UWB (Ultra Wide-band) wireless communication with multiple algorithms. The product has the advantages of high accuracy positioning, low power consumption, high anti-interference capability, low cost and small size. Easy to deploy and highly reliable. The product format is not limited and can be designed flexibly for different applications and additional functions can be added.

To meet different needs of system integration and end users , a number of data analysis and processing algorithms are used, and also a mixture of algorithms. Users can choose from a variety of positioning modes such as spatial positioning (3D), area positioning (2D) and track positioning (1D). Based on TWR and TDOA positioning methods, the system can accurately locate the position of people, vehicles, assets and surrounding environment information in real time without interruption.

UbiTrack Starter Kit is the minimum combination of hardware and software that can realize high precision positioning. The positioning range can be extended by increasing the number of anchors and tags.

Key Features

● Support for a maximum area of 900 square meters positioning

● Optional 0D, 1D, 2D, 3D positioning

● Real-time accurate position display

● Historical track playback

● Electronic Fence Alert

● Multi-algorithm Hybrid Processing

● Open API/SDK

● Multi-Level Permission Management

Content of the kit

● 4 x Indoor Anchor UbiTrack-A1

● 2 x Positioning Badge II (With Screen) UbiTrack-TB3

● 2 x Civilian Wristband UbiTrack-TWC1

● 2 x Goods Positioning Tag II-TG2(Demolition Alert) UbiTrack-TG2

● 6 x Magnetic charging cable

● 1 xUbiTrack platform software

Indoor Anchors*4   Civilian Wristband*2   Goods Positioning Tag II-TG2   UbiTrack platform software*1
                                              (Demolition Alert)*2

Specifications

Indoor Anchor UbiTrack-A1

UbiTrack-A1 provides high accuracy measurements. With its high performance MCU, it is capable of supporting large number of tags at the same time. The physical appearance of the anchor can be customized if wanted.

Power Supply: PoE or DC12V /1A
Network: Supports Ethernet(PoE)
Positioning System Frequency: 3.5GHz-6.5GHz
Operating Temperature: -20ºC to 60ºC
Dimensions: 7.87"× 7.87"× 1.77" (200mmx200mmx45mm)

Positioning Badge II UbiTrack-TB3

UbiTrack-TB3 is a second generation positioning badge which is small and handy. It is used for personnel positioning and it supports UWB positioning communication. The badge supports tracking, motion detection and SOS one-click alarm, and it can also be equipped with an optional e-ink screen to display detailed personnel information, notification information and so on.

UWB Operating Frequency: 3.5GHz-6.5GHz
UWB Transmitting Power: 0-33.5dB (Adjustable)
NFC Operating Frequency*: 13.56MHz
Additional Sensors: Acceleration Sensor
Optional E-Ink Screen*: 1.14"×1.14"(29mmx29mm)
Stand-by Power Consumption: 0.19mW
Optional Functions: Messages, vibration , RFID*, SOS, etc.
Power Supply: Rechargeable 400mAh lithium battery
Battery Life: 1-2 months（1Hz）
Dimensions: 3.50"×2.28"×0.27"(89mmx58mmx6.9mm)
Operating Temperature: -20ºC to 55ºC
Operating Humidity: 10-90%

Civilian Wristband UbiTrack-TWC1

UbiTrack-TWC1 is a smart watch positioning tag, it is mainly used for people positioning, such as the elderly or special groups. It supports UWB positioning communication. The watch has physiological monitoring, electronic fence, alarm, step counting and other functions. Its' OLED display screen can display time, heart rate, notification and other information.

UWB Operating Frequency: 3.5GHz-6.5GHz
UWB Transmitting Power: 0-33.5dB (Adjustable)
Additional Sensors: Heart rate (photoelectric)
Power Supply: Rechargeable 400mAh lithium battery
Dimensions: 1.67"× 1.67"× 0.64" (42.5mm x42.5mmx16.3mm)
OLED Screen: 1.15"×0.58" (29.4mm×14.7mm)

Operating Temperature: -20ºC to 55ºC

Operating Humidity：10-90%

Battery Life:1-3 months

Positioning Tag II-TG2(Demolition Alert) UbiTrack-TG2

UbiTrack-TG2 is a small and lightweight positioning tag with multiple installation modes, it can be attached to a helmet or other objects and enable you to accurately track people or goods.It also be equipped with an optional demolition prevention alert function to help you with device management.

UWB Operating Frequency: 3.5GHz-6.5GHz

UWB Transmitting Power: 0-33.5dB (Adjustable)

Power Supply: Rechargeable 1000mAh lithium battery

Battery Life: 1-4 months(1Hz)

Operating Temperature: -20℃ to 55℃

Operating Humidity：10-90%

Dimensions: 3.27"× 1.97"× 0.87" (83mmx50mmx22mm)

Optional Functions: Messages, voice, SOS, demolition prevention alert, etc