

## UWB Anchor

The Lansitec UWB Anchor bridges ultra-precise indoor positioning with the long-range communication of LoRaWAN, providing up to 10 cm accuracy for assets, personnel, and vehicles. By regularly synchronizing time with other UWB anchors, it calculates distances to nearby UWB trackers and transmits heartbeat data to a LoRaWAN gateway—all while operating on a low-power industrial battery that can last for years. Its IP66 enclosure safeguards against harsh conditions, making the UWB Anchor a dependable backbone for advanced real-time location systems in warehouses, factories, transportation hubs, and more.

### UWB & LoRaWAN Integration

Combine high-precision UWB ( $\pm 10$  cm) for tracking with long-range, low-power LoRaWAN connectivity for data backhaul.

### Time Synchronization

Automatically syncs with neighboring anchors to ensure consistency and precise distance calculations.

### Long Battery Life

Industrial-grade Li-SoCl<sub>2</sub> batteries can last up to 18 years (depending on tracker density and reporting frequency), minimizing maintenance.

### Durable IP66 Enclosure

Resists dust, water, and extreme temperatures (from  $-45^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ), ideal for challenging indoor or semi-outdoor environments.

### Scalable Tracker Support

Operates with up to 512 UWB trackers, easily expanding as your inventory or workforce grows.



### Adjustable Reporting Intervals

Fine-tune how frequently the anchor uploads data to balance real-time visibility with extended battery life.

### FOTA Over Bluetooth

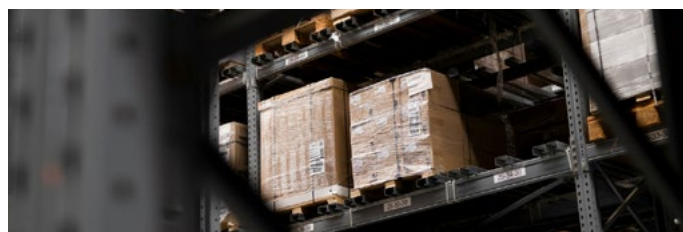
Streamline updates by installing firmware over the air, ensuring your system remains secure and up to date without complex reconfiguration.

## SCENARIO



### SECURE ASSET MANAGEMENT

Protect high-value tools, machinery, and goods by using tamper alerts and real-time location information, reducing loss and improving site-wide efficiency.

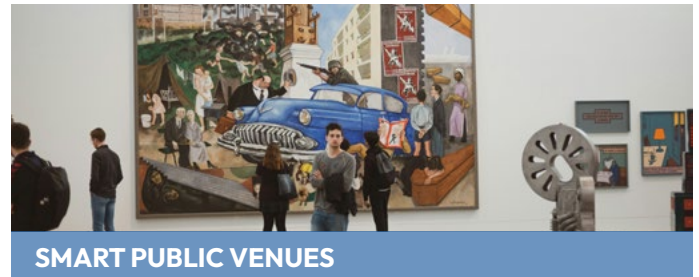


### PRECISE INVENTORY CONTROL

Gain full visibility into item location within multi-floor warehouses. Quickly locate products, speed up picking operations, and reduce errors.



**AUTOMATED MANUFACTURING & ROBOTICS**



**SMART PUBLIC VENUES**

Synchronize UWB anchors with robots or automated vehicles for collision avoidance, route optimization, and efficient material handling on factory floors.

Deploy anchors in large arenas, airports, or shopping malls for accurate wayfinding, queue management, and location-based services that enhance visitor experiences.

## SPECIFICATIONS

### LoRaWAN Connectivity

<b>Activation Mode</b>	OTAA or ABP
<b>LoRaWAN Protocol</b>	LoRaWAN 1.0.2B
<b>LoRaWAN Band</b>	US915, AU915, EU868, AS923, LA915, RU864, KR920, IN865, KZ865, CN470
<b>LoRa TX power</b>	0 to 20dBm
<b>High TX Power Option</b>	Max. 30dBm and -150dBm receiving sensitivity
<b>LoRa Sensitivity</b>	-139dBm @SF12, BW 125kHz, 434MHz/470MHz -137dBm @SF12, BW 125kHz, 868MHz/915MHz
<b>Access Quantity</b>	>500 in one LoRaWAN gateway
<b>LoRa Communication Distance</b>	>2km in the urban area
<b>Encryption</b>	AES128

### UWB

Regions	Europe	US	Japan	S.Korea	Singapore	China
<b>Frequency Band</b>	6.0 to 10.6 GHz	3.1 to 10.6 GHz	7.25 to 10.25 GHz	7.2 to 10.2 GHz	3.4 to 10.6 GHz	6.0 to 9.0 GHz
<b>Receiving Range</b>	Up to 23m					
<b>Max. Number of Trackers Supported</b>	512					

### Physical Parameters

<b>Dimension</b>	160*160*55mm
<b>Operating Temperature</b>	-45°C ~ +85°C
<b>Storage Temperature</b>	-60°C ~ +90°C
<b>Operating Humidity</b>	0% ~ 95% (non-condensing)
<b>Weight</b>	530g
<b>Ingress Protection</b>	IP66

### Power

<b>Standby Current</b>	5µA
<b>Switch</b>	Support
<b>Status LED</b>	Support
<b>Battery</b>	Li-SoCl2 Battery, 19000mAhx4

## Battery Life

When the tracker is still, it will enter low-power mode

Number of Trackers Supported	64 units	192 units	512 units
<b>Anchor Battery Life @ 76000mAh</b> 10s advertise interval	18 years	10 years	4.8 years
<b>Tracker Battery Life @ 600mAh</b> 60s report interval	37 days	32 days	25 days
<b>Container &amp; Asset Management Tracker Battery Life @ 8000mAh</b>	16 months	13 months	11 months

## Functions

<b>Heartbeat Report Interval</b>	30s x n (1 to 65536)
<b>FOTA over Bluetooth</b>	Support
<b>Multiple Bluetooth gateway LoRaWAN report synchronization</b>	Sync the clock and LoRaWAN report
<b>TDMA</b>	Support
<b>Bluetooth Data Compression</b>	Support
<b>Configurable Bluetooth data filter and payload report</b>	Filter any data bytes in a Bluetooth payload and report any via LoRaWAN

<b>Certification</b>	CE, FCC
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## ORDERING INFORMATION

Product Description	Part Number
UWB Anchor, LoRaWAN, Bluetooth, 160x160x55mm, 76,000mAh	100-000U1