RTLS TDOA SYSTEM OVERVIEW

Technical Overview

- Compliant with UWB PHY IEEE 802.15.4a
- DecaWave UWB Radio
- 4 Channels
- 3 – 7 GHz

RTLS Devices

Tags

Tag is an active mobile locator. Its position is reported within selected refresh rate. Tracked object need to be equipped with this device.

- Movement Detection
- 3D Spatial Orientation
- Firmware Source Code
- Schematics
- UWB Location

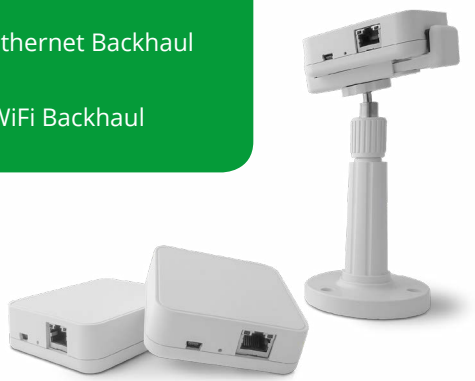
Tag Piccolino

Tag IMU

Anchors

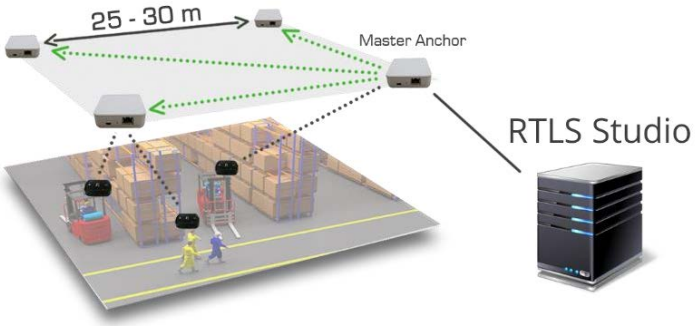
Anchor is a referential device with a known position. Set of Anchors creates location infrastructure where Tags are being located.

- UWB Location
- Ethernet Backhaul
- WiFi Backhaul



System Architecture

Anchors are mounted on the ceiling and placed in a grid manner. Tags transmit UWB signals to Anchors, which send data to a server via Ethernet or Wi-Fi. The server is preloaded with RTLS Studio, which is a user friendly software with many features.



Key Fearures

Accuracy

from presence detection to decimeter level of accuracy

Devices

from < 10 to more than 1000

Space

from one cell covered by 4 Anchors to almost unlimited number of cells

Position Update

from 60s to 100ms