

"The Missing Link" of IoT

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The remaining important IoT questions

Who?

Where?

What?

When?

There are also these questions for Tracking Technologies

Mobile phones?

Power consumption?

Battery life?

Real time?

Other devices?

How fast to deploy?

How accurate?

How secure?

Cost of ownership?

Cost?

IoT gateway?

2-way?

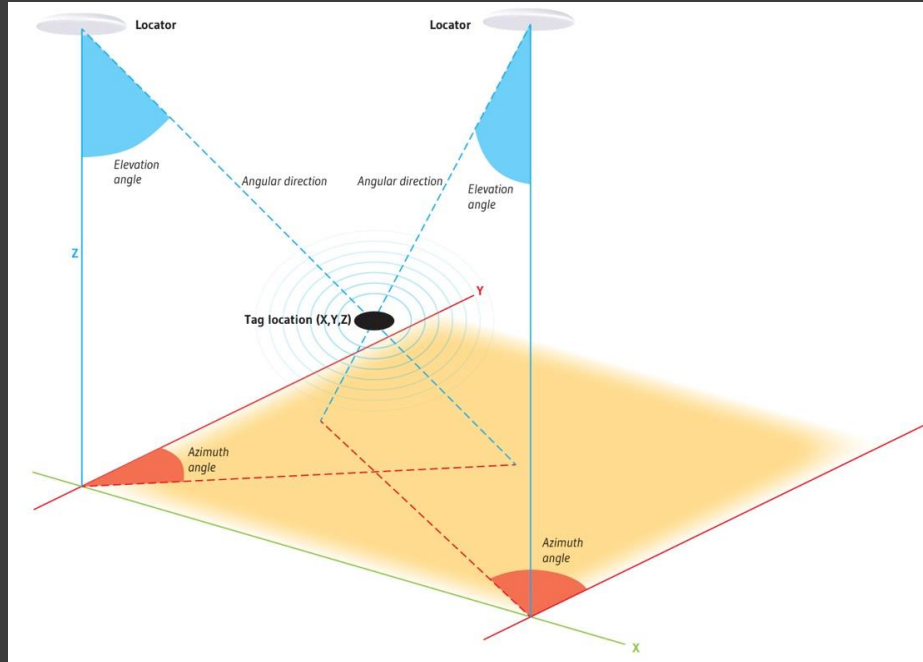
Interference?

Tags available?

What distance?

What else?

Quuppa's unique positioning principle



Quuppa Intelligent Locating System™ uses Angle of Arrival (AoA) methodology with advanced algorithms, and standard Bluetooth Low Energy (BLE) technology to provide real-time high accurate positioning even in the most demanding environments.

Bluetooth Low Energy (BLE)



Angle of Arrival (AoA)



Benefits of BLE+AoA

High Accuracy
positioning down to
10cm

Real-time positioning
with latency down to
100ms

Interoperability -
tracking of tags and
smartphones



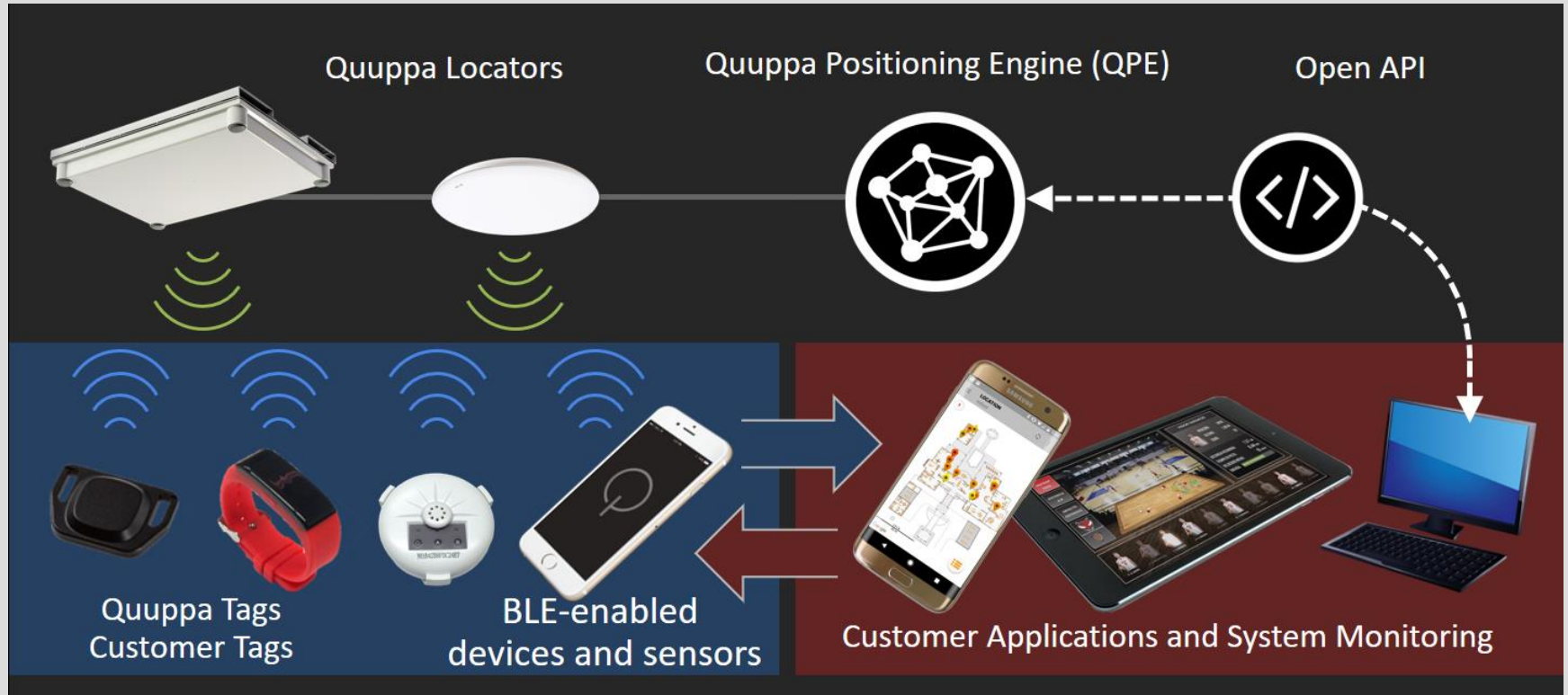
No vendor lock-in -
open BLE tag ecosystem
and open APIs

Competitive TCO -
low price tags with long
battery-lifetime

Future-proof
mobile-centric-ready (AoD)



Quuppa Intelligent Locating System™



Technology comparison

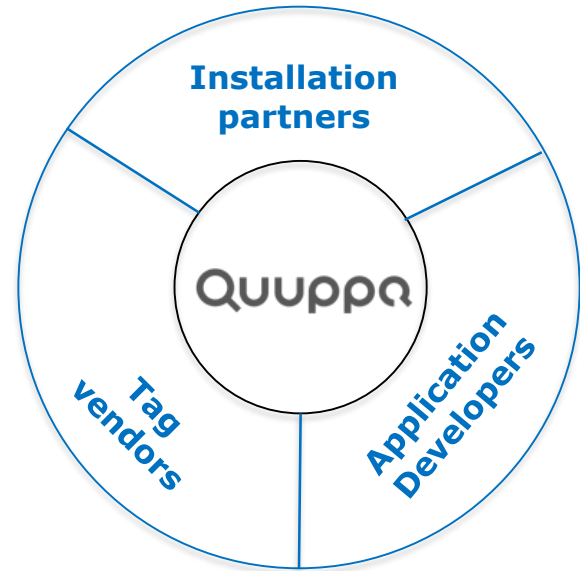
	Quuppa (BLE/AoA)	UWB (RTT)	UWB (TDOA)	WiFi / Active RFID (RSSI)	Beaconing (RSSI)
Developed for positioning	Yes	Yes	Yes	No	Some profiles
Tag power consumption	Very Low	Very High	Low	High	High
Accuracy	0.1 – 1m	0.1 – 1m	0.1 – 1m	5 – 20m	5 – 20m
Real-time	Yes	Yes	Yes	No	No
Smartphone compatible	Yes	No	No	Yes	Yes
IoT Gateway	Yes	No	No	Yes	No
Cost of setup	Medium	Medium	Very High	Medium	Low
Cost of ownership	Low	High	Medium	Medium	Medium

Quuppa Partner Ecosystem




















Quuppa is the first indoor location company to take an ecosystem view of the RTLS market.


More than 80 best-of-breed partners worldwide, including installation partners, tag vendors, application developers and system integrators, including Lufthansa Industry Solutions, Fujitsu, Tieto and dozens of others.

Quuppa offers its partners an open HW and SW API platform, tag development program, partner community site allowing partners to focus on what they do best, speeding up the time to market.



Example of some of our partners, building solutions across a wide range of industries on the Quuppa platform

Sports	Retail	Healthcare	Smart Buildings	Manufacturing & Logistics	Military & Law Enforcement
   	 	  	  	   	  



Providing an open and scalable hardware and software platform for all industries

Quuppa unlocks the full potential of indoor location-based services without compromising among accuracy, compatibility and cost

Founded in 2012

Spin-off from Nokia Research Center

Global presence: HQ in Finland; offices in Washington, D.C., and Shanghai

Technology has been developed by the founding team since 2005

Broad ecosystem of Value Added Resellers and System Integrators

More than 1000 systems delivered to over 50 countries



Gartner 2015
CoolVendor

Partner testimonial



“Quuppa's location technology is reliable and highly accurate, and it helps keep our IoT solutions very competitive in challenging environments in Japan and around the world where we deploy our location based solutions.”

Hiroyuki Goto, vice president, Retail & Logistics Division,
Innovative IoT Business Unit, Fujitsu Ltd.

Partner testimonial



**Lufthansa
Industry Solutions**

“Thanks to the open architecture of the Quuppa system, we are not only able to capture accurate location information for all kind of objects, but also information about their condition. This allows us to implement a variety of process improvements in several industries. Quuppa offers us the flexibility we need to integrate our own sensors and tags. This enables us to subsequently extend our capabilities. An electronic kanban system and the digitization of forklifts are examples of this.”

Dr. Holger Schlüter, associate director IoT/Industrie 4.0 at Lufthansa Industry Solutions AS GmbH.

Partner testimonial



“We have been working with Quuppa more than three years and it is still the only tag-based indoor positioning solution that can deliver amazing accuracy in complex, maze-type office environments. Only with Quuppa we can show location data to end users as it is in our Empathic Building service.

Tomi Teikko, Heart of Empathic Building, Tieto Corp.

Summary

Quuppa unlocks the full potential of indoor location-based services for IoT without compromising accuracy, compatibility and cost.

Quuppa enables a Partner Ecosystem of infrastructure, devices and service providers to offer accurate indoor location services.

Quuppa is the father of the BLE standard for global indoor location services, with the current products being already standard-ready.



What do you want to track?

QuUppQ

谢谢

Thank You

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