



Spatial Sensing Infrastructure for AI-Driven Future

Delivering Location-Awareness Digital Twin for Autonomous AI

Infra-less indoor and outdoor positioning technique

One-stop hardware and software customized integrator

Value-creation commercialize future-oriented technology

support@oriongo.me

Mar 2025

ORIONGO

Our Services



Joint Innovation Project Planning

Craft the roadmap for digital transformation with AI operation, turning visions into actionable plans.



Infra-free AI Model Positioning

Provide positioning solutions correspond energy saving with zero carbon to obtain most valuable data, the location of personnel and assets.



One-stop 5G AIOT Integration

Provide required hardware including service if necessary 5G, IOT, controller and sensor.



Data Value Quantification

Turn data into insights, and insights into growth, realize data-driven precise operating model.



Digital Twin Transformation

Fully integrate data from hardware and software solutions to obtain operation data for digital twin.



AI Adaptive Operation

AI-driven digital twin and adaptive operation model provide field autonomous decision-making capabilities and deployable robots.

Affordable Positioning Technology

Technical pain point for digital transformation



Too many
external hardware



Electronic pollution



High Total Cost
of Ownership

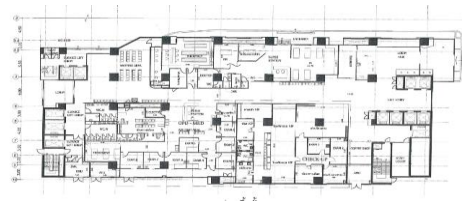


Construction risk and
building impact

OrionGo Patented AI Positioning Online Demo

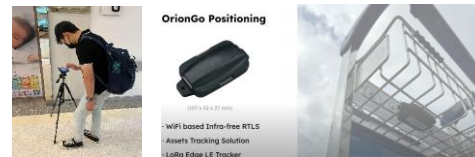
Step1

Digitalization of site map
with buildings and floors



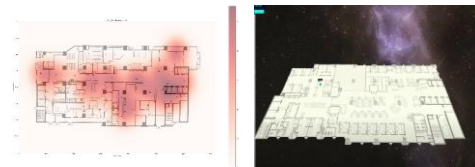
Step2

Existing signal collect per
50 m² / 3mins for modeling



Step3

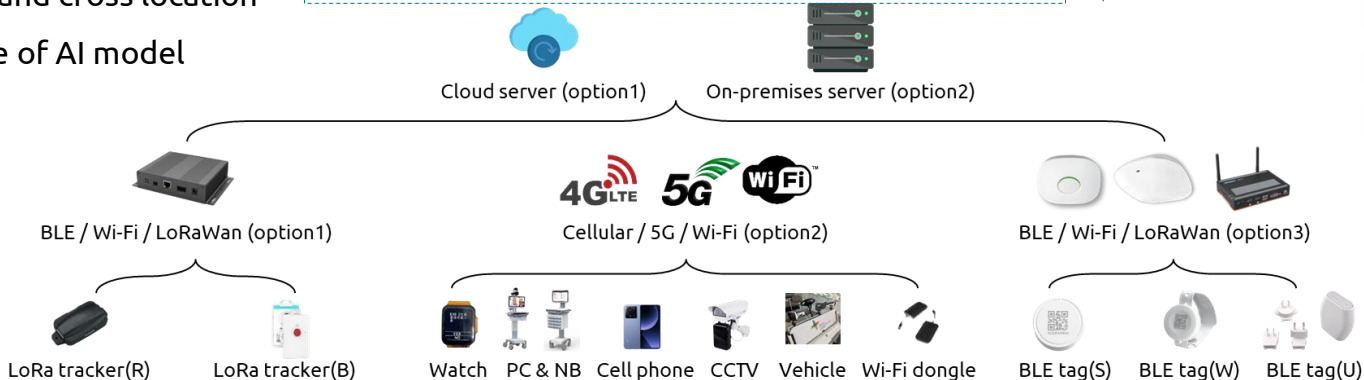
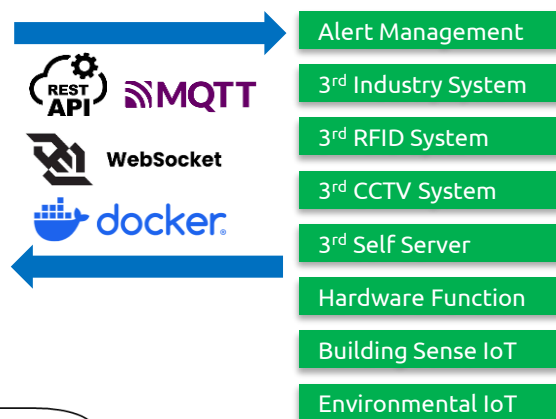
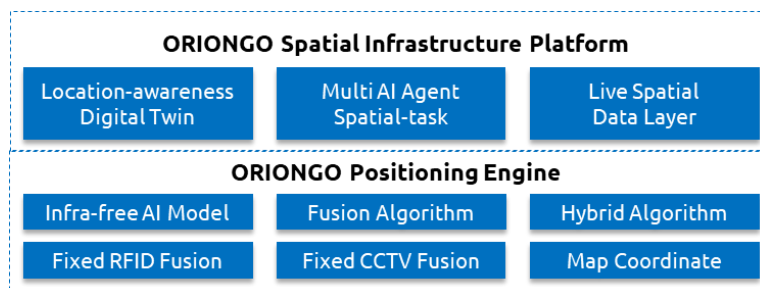
Empowering digital twin
with location-awareness



Spatial Sensing Infra AI Platform Overview

AI Platform Advantages

1. No change and impact to infra
2. Rapid deployment in 1~7 days
3. Support most hardware types
4. Flexible scale and cross location
5. High tolerance of AI model



[Factory](#)

[Hotel](#)

[Deploy Process](#)

[Asset Auto-counting](#)

[Search Asset](#)

[Asset Tracking](#)

[Special Asset](#)

[Smart Patrol](#)

[Workforce Safety](#)

[Indoor and Outdoor](#)

[High Maintainability](#)

Case Study 1 - Airport Ground Handling

Case brief: mobile assets and staff tracking at three terminals in airport using infra-less technologies

Area of coverage: 1,153,312 square meters

Offering: Positioning algorithm inside IoT and issued phone, Cloud SaaS, Web dashboard, Data analysis

Functionality: tracking, specific conditions alert, usage data analysis and intelligent dispatch of ground crew

Number of tracked objects: 300

Results: operation data visualization, ground handling operation optimization, decarbonizing location data

Demo: <https://tw.psee.ly/6el4ga>



Positioning Engine
embedded Phone



Ground Service



Positioning Engine
embedded IoT Device



Wheelchair



Aisle Chair



Trolley



Buggy

Case Study 2 - Airport 5G Application

Case brief: mobile assets and staff tracking at one terminals in airport using infra-less technologies

Area of coverage: 88,843 square meters

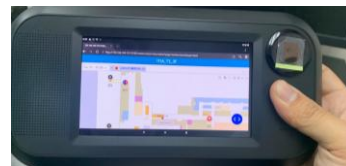
Offering: Positioning algorithm inside 5G IoT and issued watch, On-premises, Web dashboard, Data analysis

Functionality: tracking, usage data analysis and intelligent dispatch of ground crew

Number of tracked objects: 60

Results: operation data visualization, patrol operation optimization, 5G private network LBS application

Demo: <https://tw.psee.ly/5qgnsn>



Case Study 3 - Airport Trolley Management

Case brief: mobile trolley tracking and alert when area trolley number not enough, the customer doesn't have enough budget for mass implementation POC

Area of coverage: 70,077 square meters

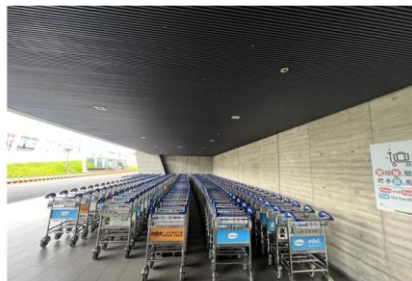
Offering: Positioning algorithm inside IoT, SaaS, Web dashboard

Functionality: tracking, intelligent dispatch of ground crew

Number of tracked objects: 5

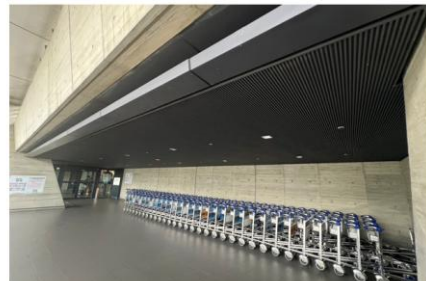
Results: operation data visualization, LBS dispatch, easy to manage trolley with flexible cost

Demo: <https://tw.psee.ly/6g5ntd>



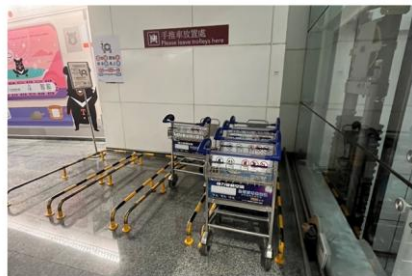
▲北巡

★北巡擺放五至六排約180台



▲南巡

★南巡擺放兩排約120台



▲機捷

★機捷擺放約5台



▲電車

★電車擺放約10台

Case Study 4 - Advance Factory Patrol

Case brief: mobile assets and staff patrol AR application in 5G private factory using infra-less technologies

Area of coverage: 7,075 square meters

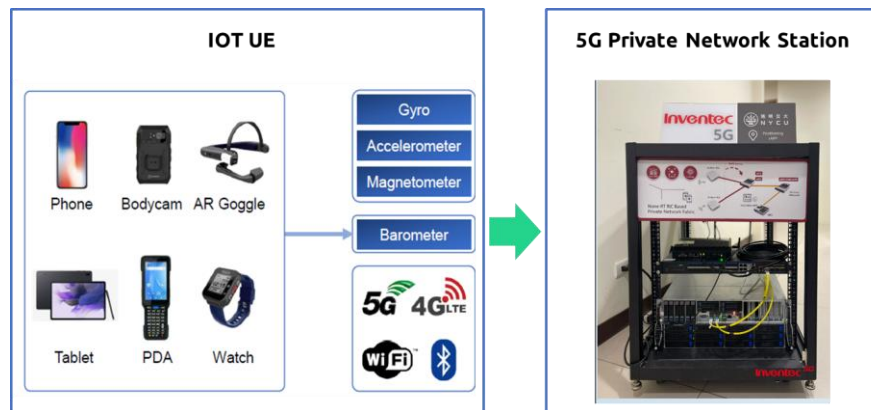
Offering: Positioning SDK for 2nd development into patrol App, On-premises

Functionality: Patrol AR application, digital twin, location data trigger AR info board

Number of tracked objects: 10

Results: Customer use positioning SDK for 2nd development and reduce image-based location recognition cost

Demo: <https://tw.psee.ly/6elfwz>



Case Study 5 - Global Healthcare PC License

Case brief: mobile assets mounted medical PC inside positioning algorithm using infra-less technologies

Area of coverage: N/A

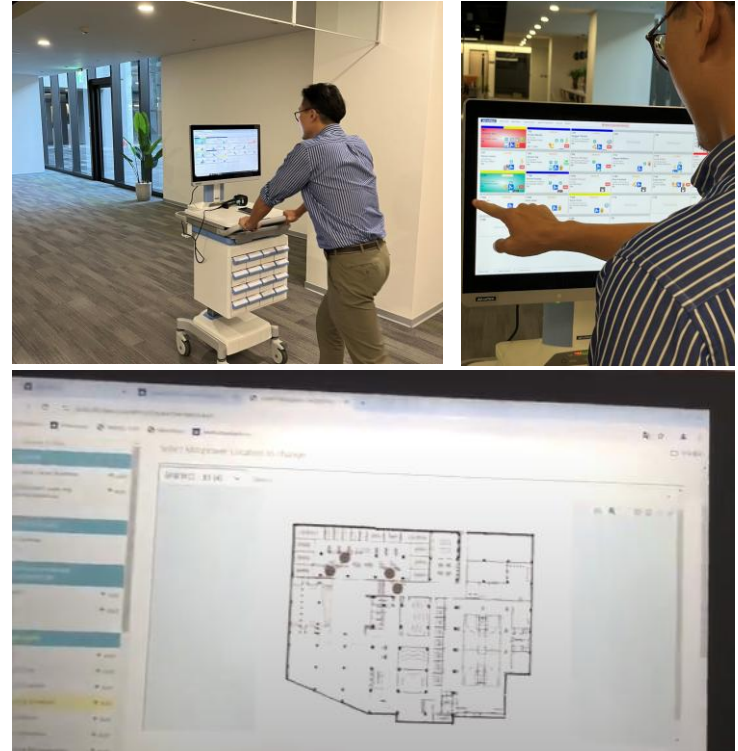
Offering: Positioning algorithm inside medical PC, solution deployment toolkit, Cloud SaaS, Web dashboard

Functionality: tracking, specific conditions alert, usage data analysis, target nursing cart quick finding

Number of tracked objects: N/A

Results: operation data visualization, nursing operation optimization, decarbonizing location data

Demo: <https://tw.psee.ly/6elq9b>



Case Study 6 - Advance Warehouse Cargo

Case brief: mobile assets with forklift in warehouse using infra-less technologies

Area of coverage: 32,926 square meters

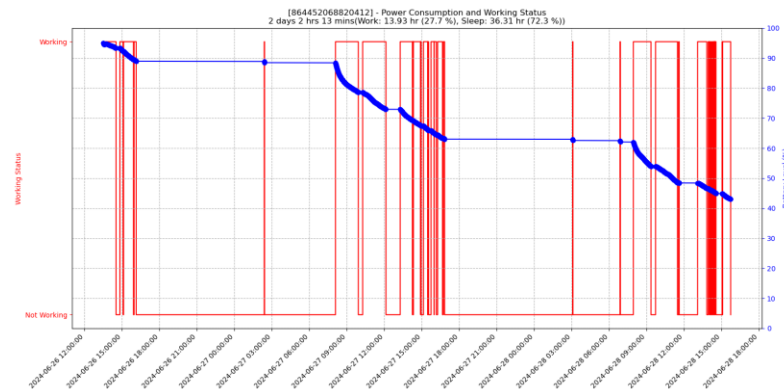
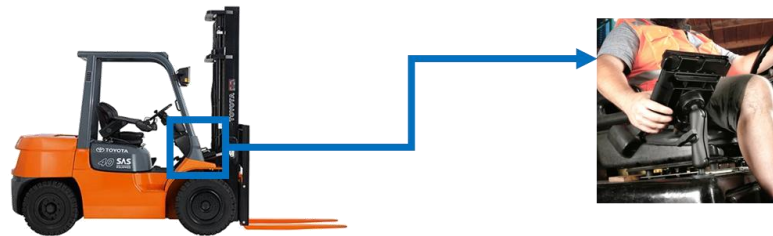
Offering: Positioning algorithm inside IoT, Cloud SaaS, Web dashboard, Data analysis

Functionality: tracking, specific conditions alert, usage data analysis, target forklift quick finding

Number of tracked objects: 2

Results: operation data visualization, forklift operation optimization, decarbonizing location data

Demo: <https://tw.psee.ly/6elqhc>



Case Study 7 - Advance Warehouse Patrol

Case brief: mobile assets with patrol PDA & Body-Cam in chemical factory using infra-less technologies

Area of coverage: 32,926 square meters

Offering: Positioning SDK for 2nd development into patrol App, Cloud SaaS

Functionality: 2nd development patrol application, digital twin, patrol form triggered by location data

Number of tracked objects: 3

Results: patrol data visualization, patrolman operation optimization, decarbonizing location data

Demo: : <https://tw.psee.ly/6engbb>



1.警衛室

2.物料課魚池

3.紡三1F品管室

4.紡三1F #40

5.紡三2F樓梯口

6.紡三2F變電室

中環廠警衛室物料課魚池紡三1F品管室紡三1F #40紡三2F樓梯口紡三2F變電室

單位名稱

CaseA部

計畫描述

紡三每日巡檢計畫

查詢

清空

結束追蹤

計畫名稱	點位名稱	座標	時間
紡三每日巡檢計畫	紡三2F變電室	1778,931	2023/8/9 下午 02:15:39
紡三每日巡檢計畫	紡三2F樓梯口	1681,938	2023/8/9 下午 02:15:27
紡三每日巡檢計畫	紡三1F #40	1785,1000	2023/8/9 下午 02:14:58
紡三每日巡檢計畫	紡三1F品管室	1502,1049	2023/8/9 下午 02:14:18
紡三每日巡檢計畫	物料課魚池	1193,515	2023/8/9 下午 02:13:12
紡三每日巡檢計畫	中環廠警衛室	137,467	2023/8/9 下午 02:11:31

目前站點: 紡三2F變電室

Case Study 8 - Advance Campus Patrol

Case brief: mobile assets with patrol PDA & Body-Cam in campus using infra-less technologies

Area of coverage: 10,000 square meters

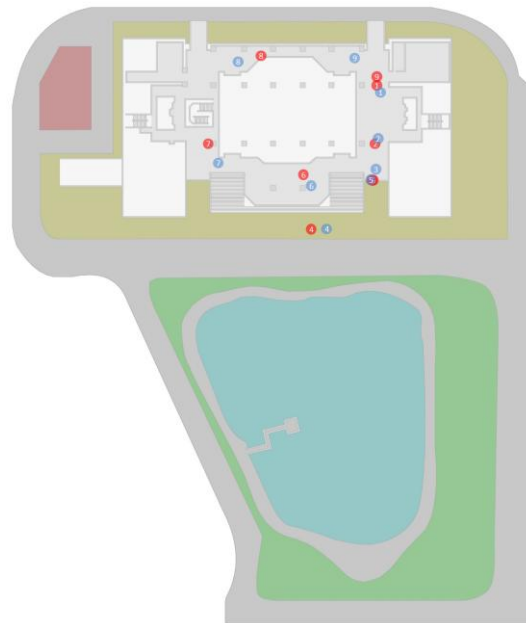
Offering: Positioning SDK for 2nd development into patrol App, Cloud SaaS

Functionality: 2nd development patrol application, digital twin, patrol form triggered by location data

Number of tracked objects: 1

Results: patrol data visualization, patrolman operation optimization, decarbonizing location data

Demo: <https://tw.psee.ly/6elqu8>



Point	Error (m)
1	1.29
2	1.17
3	2.85
4	2.95
5	0.65
6	3.40
7	4.56
8	4.99
9	7.08
Avg.	3.22

More Reference Case In Asia



Singapore Airport



Taiwan Airport



Delta Group



Global 5G EMS Factory



Utility Tunnel



Taipei GOV Hospital



University Campus



Semiconductor Factory

Call To Action

Ready to Deploy Future?



- ❑ What you want to positioning
- ❑ Pain points you want to solve

Want impossible to reality?



- ❑ What you want to AI operates
- ❑ Pain points others can't solve

Your Location-Awareness Transformation Partner

Infra-less indoor and outdoor positioning technique

One-stop hardware and software customized integrator

Value-creation commercialize future-oriented technology



Contact Us: support@oriongo.me

oriongo

Tiered Location-Awareness Transformation



Ling

Infra-Free Core Engine

Everything with everywhere positioning capabilities

- ❑ SaaS plan (API call)
- ❑ OEM license (quantity)
- ❑ On-Prem deploy (project)

#PC has its location[x, y, z]

#App has location service



Yuan

One-stop 5G AIOT Digital Twin

Building & sense with everything location and behavior visualization

- ❑ Project (device and field size)
- ❑ Maintenance (fixed percentage)
- ❑ Specific module (quantity)

#People views everything status

#Robots understandable world



Dao

Self-Adaptive AI Operations

Spatial AI with decision-making, optimization and action

- ❑ AlaaS (computing amount)
- ❑ Operation sharing (percentage)
- ❑ Long-term franchise cooperation

#Everything works autonomously

#Robots operate like omniscience