

[illegible]

AIOT

A central illustration featuring a hand holding a green smartphone. Surrounding the phone are various icons representing AIoT components: a robot, a person icon, a bar chart, a camera, a server, a calendar, a traffic light, a coffee cup, a clipboard, a Wi-Fi symbol, a mail icon, a heart in a speech bubble, a plug, and binary code.

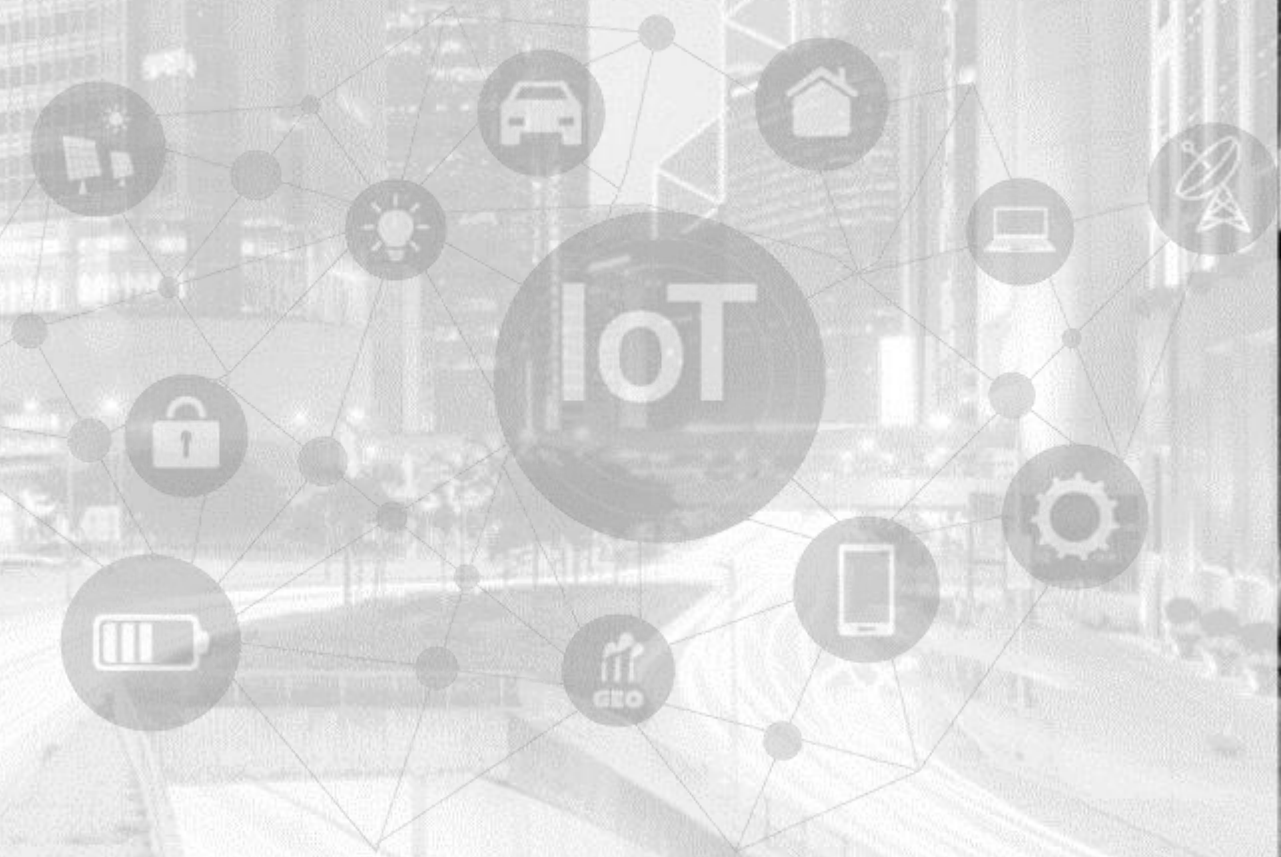
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Who is ChinoINT?



Customers & Solutions

IOT Smart Facility Management	Smart Site Safety System	AI + Predictive Maintenance
<div data-bbox="147 382 769 554">  <p>建築署 Architectural Services Department</p> </div> <div data-bbox="147 568 769 731"> <p>機電工程署 EMSD</p>  <p>M+ westKowloon 西九文化區</p> </div> <div data-bbox="147 745 769 873">  <p>THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學</p> </div> <div data-bbox="147 888 769 1053">  <p>香港 國際機場 HONG KONG INTERNATIONAL AIRPORT</p>  <p>啟德 KAI TAK SPORTS PARK</p> </div> <div data-bbox="147 1068 769 1245">   </div>	<div data-bbox="937 459 1559 602"> <p>CLP  中電</p> </div> <div data-bbox="937 688 1559 831">  <p>suez</p> </div> <div data-bbox="937 939 1600 1011"> <p>Nga Ying Decoration Ltd</p> </div> <div data-bbox="937 1096 1600 1159"> <p>Por Mee Factory Building</p> </div>	<div data-bbox="1763 388 2390 525">  <p>THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學</p> </div> <div data-bbox="1763 559 2390 702"> <p>CLP  中電</p> </div> <div data-bbox="1727 739 2425 896">  <p>仁安醫院 UNION HOSPITAL</p> </div> <div data-bbox="1814 945 2313 1039"> <p>SIEMENS</p> </div> <div data-bbox="1763 1053 2374 1230"> <p><i>ITChannel</i> </p> </div>

ChinoINT Know-How & Strengths

Hong Kong R&D

- local R&D team
- local expert support
- Chartered Engineer



Software Capability - AIOT Platform

- Complete Feature
- Deployed
- AI-integrated



Hardware Design Capability

- IOT sensor design
- Gateway design
- NRE cabability



AI & Algorithms Development

- 11 innovation patents owned by executives
- deployed 4S with AI
- deployed AI solutions at local univeristy, and government building



Customization to Fit All Situations

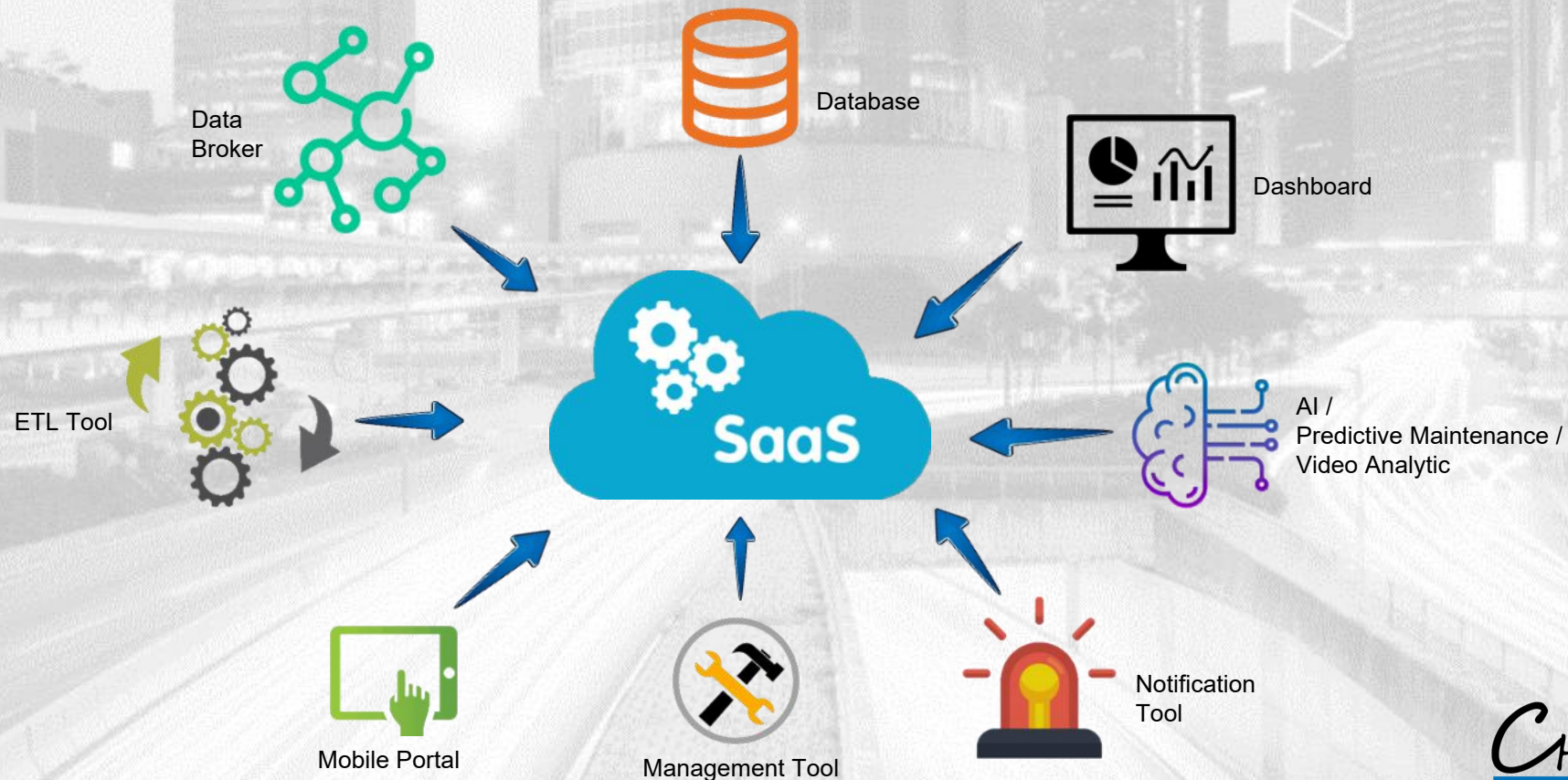
Tailor-made equipment and customization is one of ChinoINT's strength. No matter it is thick-wall / metallic-wall of ware-house, walk-in freezed, or signal dead-zones, ChinoINT is able to custom-made solution and equipment to fit into different environment. This offers the most cost effective solution to solve different problems.



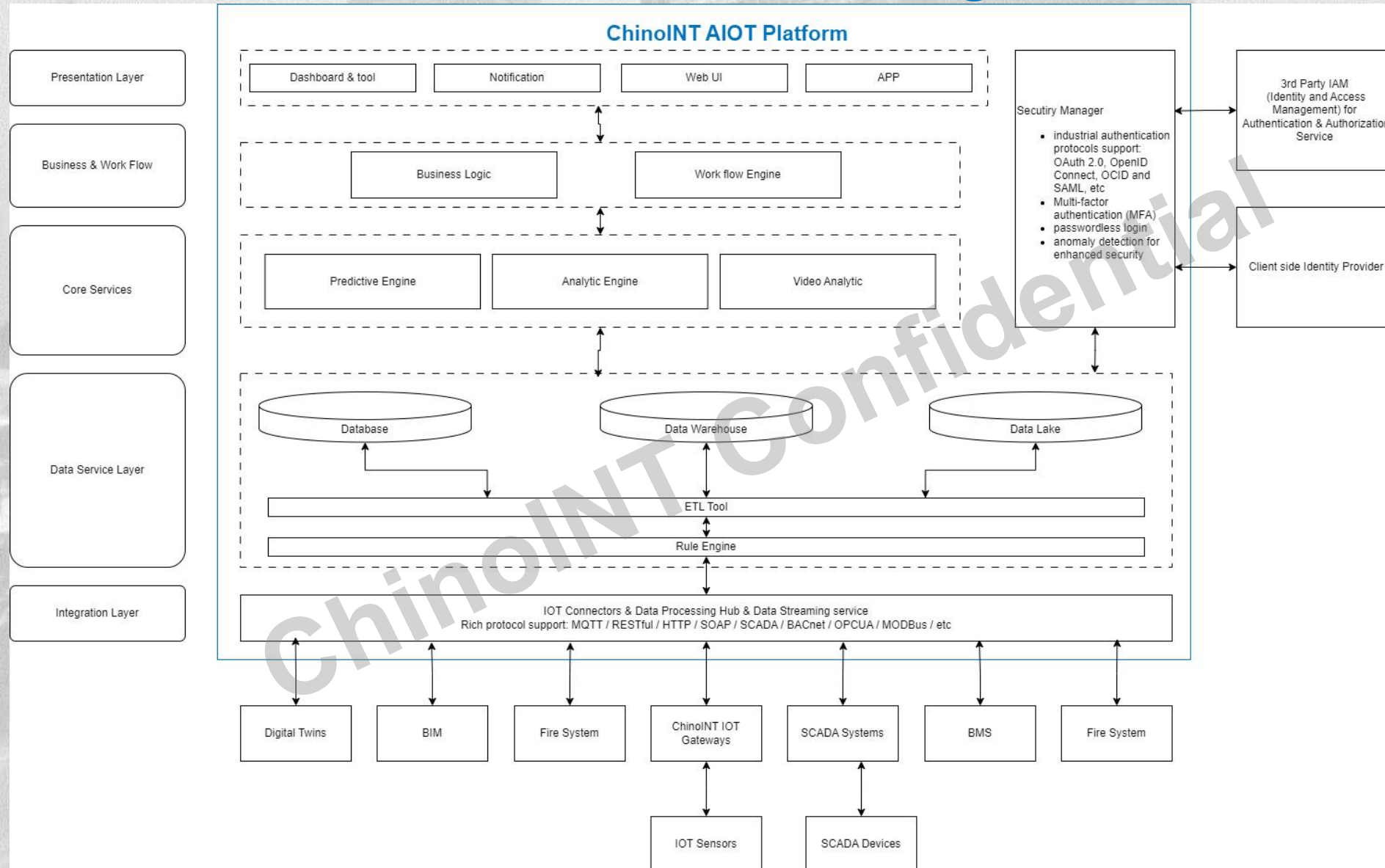
ChinoINT SaaS

ChinoINT creates the next generation SaaS and IOT platforms.

The SaaS is a complete platform including data broker, ETL tool, Database, dashboard, management tools, mobile portal and notification tools, etc. This fulfills all your IOT needs and generates extra values to our clients.



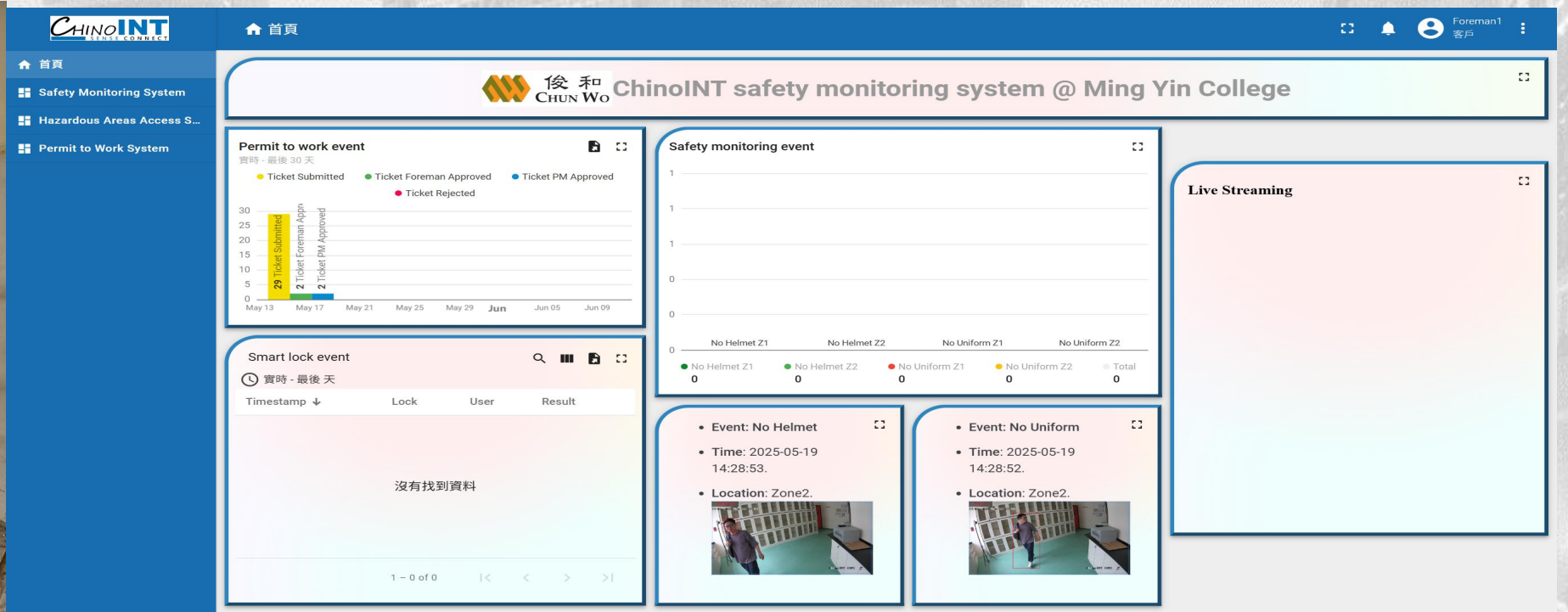
Architecture Diagram



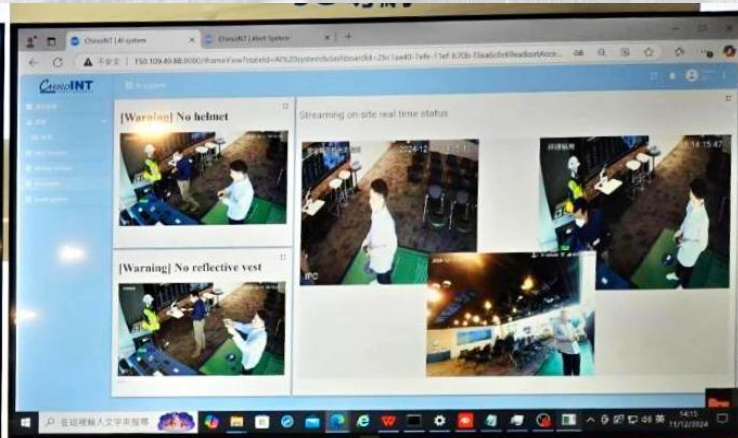
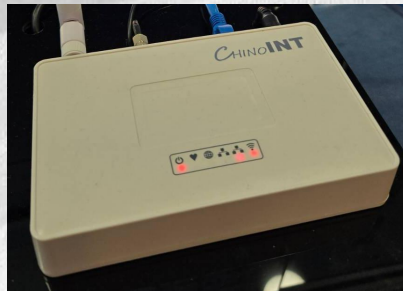
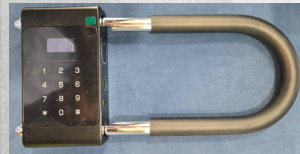
Dashboard Designs - Smart Site Safety System



SSSS - ChunWo CMP & Maintenance Project



ChinoINT X CMHK: SSSS with 5G Open Lab @ HKSTP



Event Information Status
Welcome to scan the device

Event Serial number: [input]
Event: [input]
Event location: [input]
Event date: [input]
Event time: [input]

Construction: [input]
Project Manager: [input]
PPE status: [input]
PPE contact number: [input]
Emerging contact person: [input]
Emergency contact number: [input]

Worker list
Name: [input]
Position: [input]
Contact info: [input]
ECC worker name: [input]
ECC worker phone: [input]
ECC worker ID card: [input]

Approval status: [input]
Approval person: [input]
Approval date: [input]

Device Information Status
Welcome to scan the device

Serial number: [input]
Device Name: [input]
Type: [input]
Applicant: [input]
Model number: [input]
Status: [input]

Approval History
Date: [input]
Location: [input]
Approvers: [input]

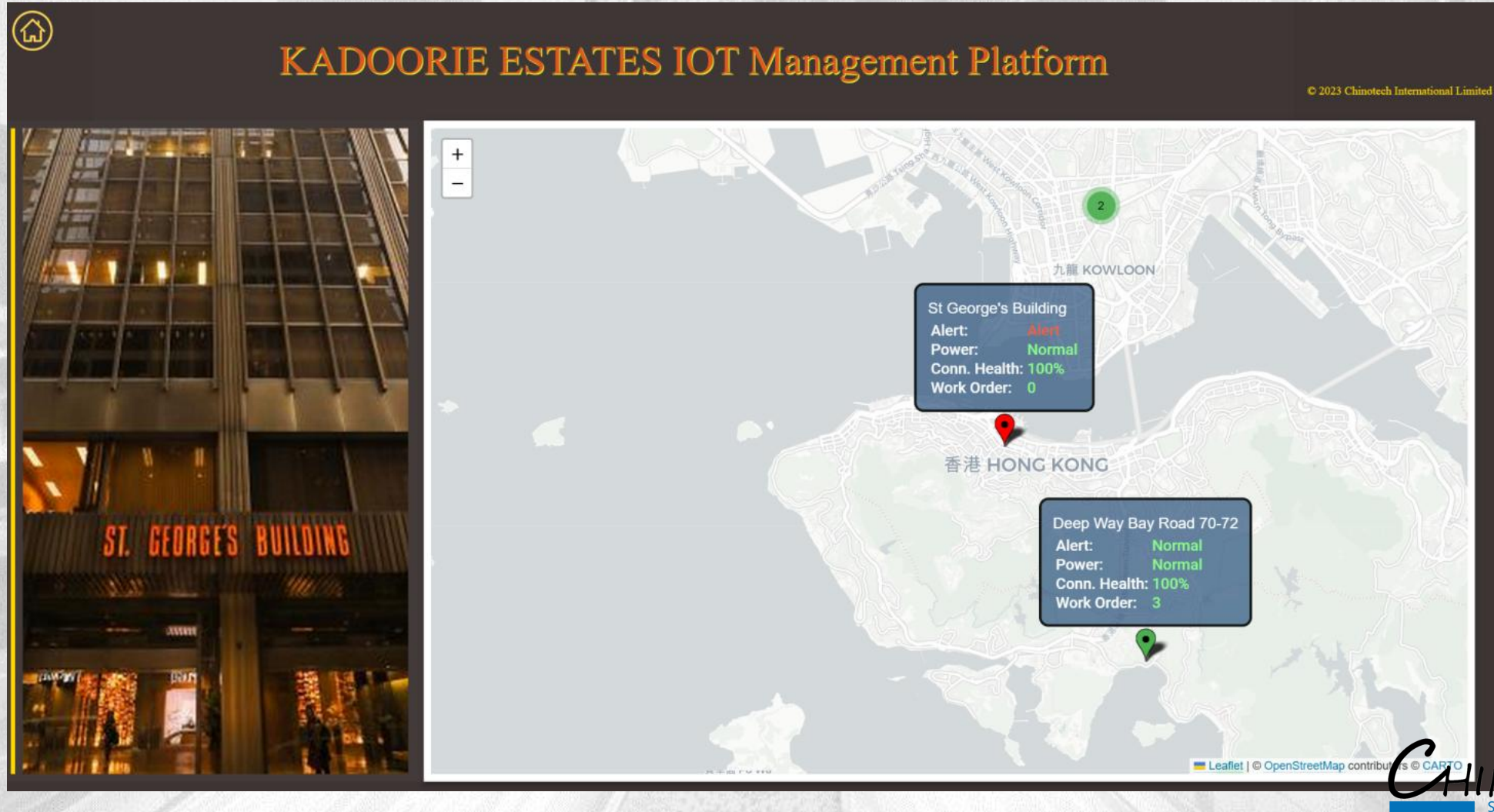
Next check date: [input]
Device Photo: [input]
Device code verify: [input]
Approvers: [input]
Approval Date: [input]



Dashboard Designs - Smart Housing Estate Management Platform

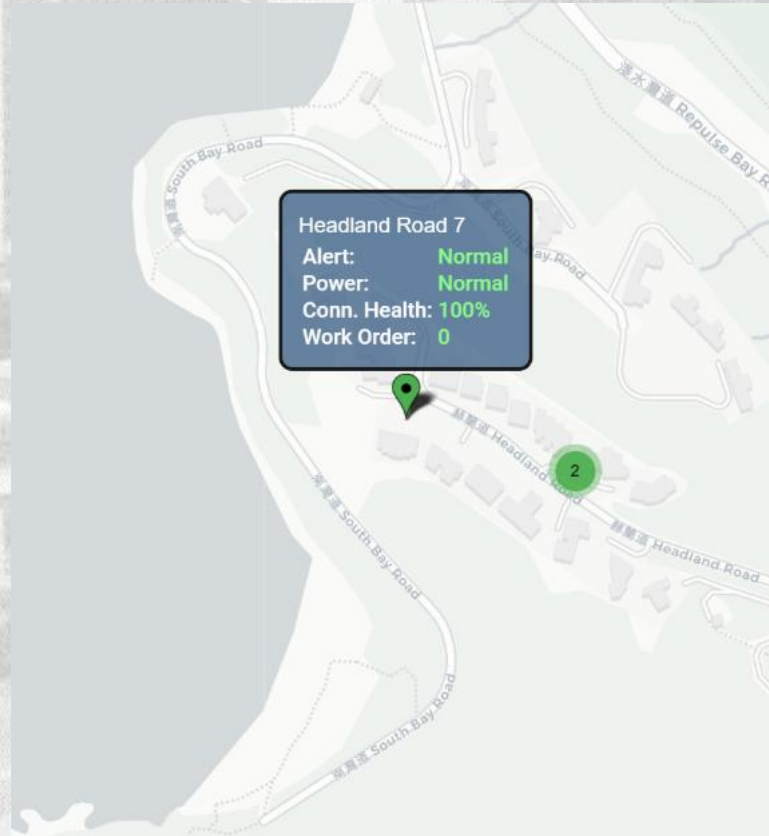
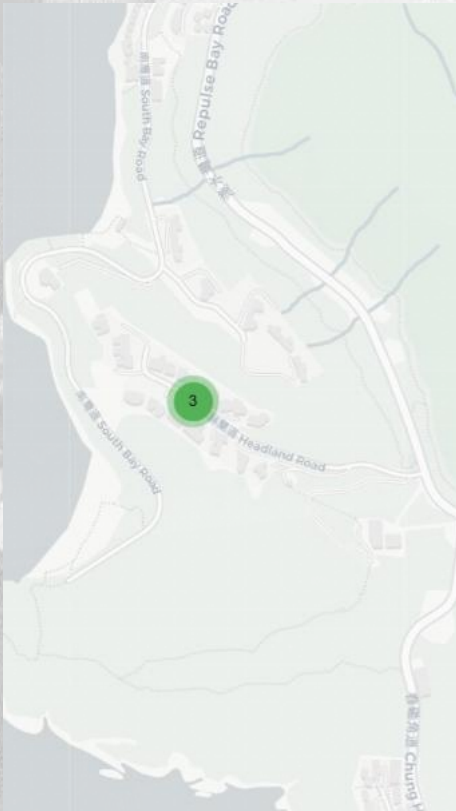
Dashboard Reference - Facility Management Platform for Estates

Overview for all estates in one welcome page



Dashboard Reference - Individual System View

Automatic zooming and fit all estates into one screen



Dashboard Reference - Estate Dashboard



Dashboard Reference - Individual System View

KADOORIE AVENUE Power System

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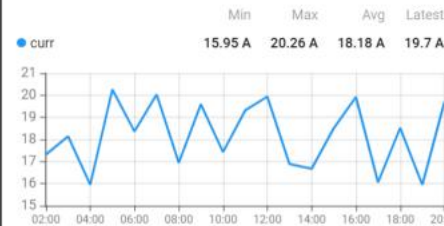
Switch Room Voltage

歷史 - 從 2025-09-01 01:58:00 到 2025-09-01 20:00:00



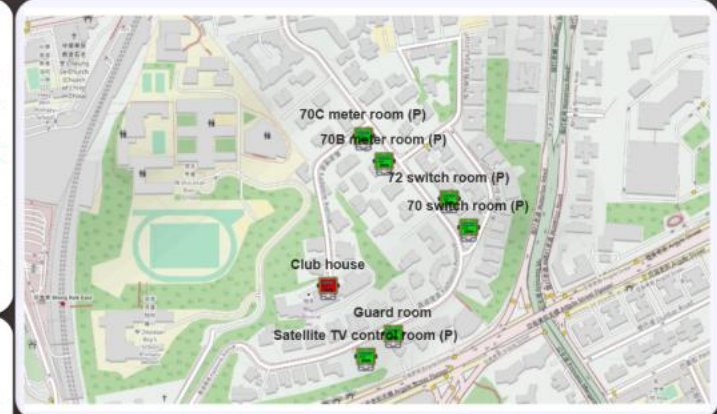
Switch Room Current

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:01:00



Switch Room THD

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:00:00



Club House Voltage

歷史 - 從 2025-09-01 01:58:00 到 2025-09-01 20:00:00



Club House Current

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:01:00



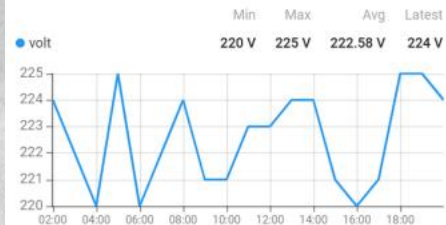
Club House THD

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:00:00



Guard Room Voltage

歷史 - 從 2025-09-01 01:58:00 到 2025-09-01 20:00:00



Guard Room Current

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:01:00



Guard Room THD

歷史 - 從 2025-09-01 01:59:00 到 2025-09-01 20:00:00



Alert Record

實時 - 最後 30 天

Time	Location	Event
2025-8-22 14:07:42	Club house	Current Over threshold
2025-8-22 14:01:23	Club house	Current Over threshold

Items per page: 10

1 - 2 of 2

Dashboard Reference - Individual System View

KADOORIE AVENUE Entrance System

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Entrance Record

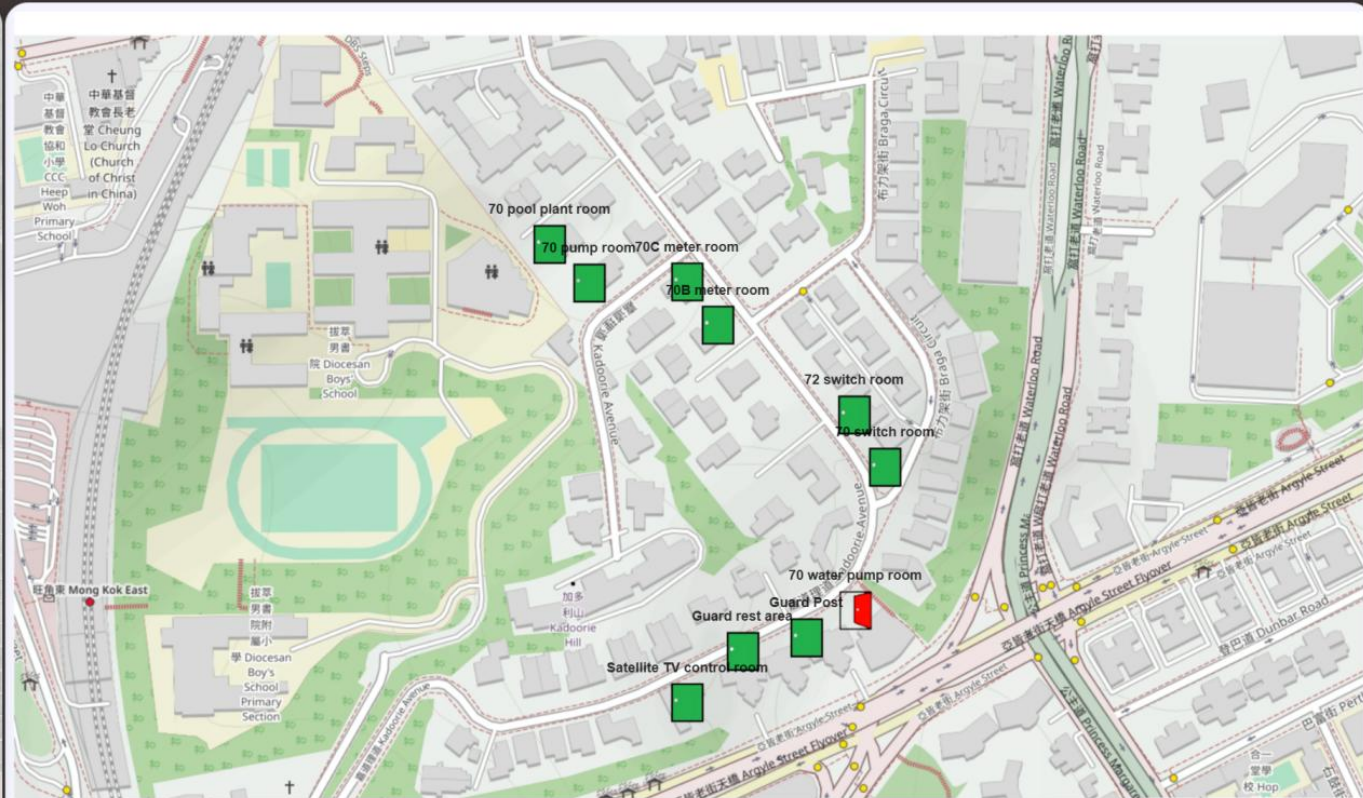
實時 - 最後 30 天

Time	Location	Door Open Period
2025-10-25 11:51:28	70 pump room	26 min
2025-10-08 16:38:09	70C meter room	11 min
2025-10-02 10:20:43	70B meter room	4 min

Items per page:

10

1 - 3 of 3



Dashboard Reference - Residents Info Panel

22°C 42%

King's Park

↓18°C ↑24°C

KADOORIE AVENUE

16:05:41
Fri, 21 November
2025

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Lift Average Monthly Electricity Consumption

電梯平均每月使用電量

↓13.68%

This month 本月

13678

kWh

Last year 上年

15548

kWh



Average Monthly Total Electricity Consumption

平均每月使總電量

↓6.68%

This month 本月

22443

kWh

Last year 上年

23736

kWh



Average Monthly Total Water Consumption

平均每月使總水量

↑5.45%

This month 本月

11.68

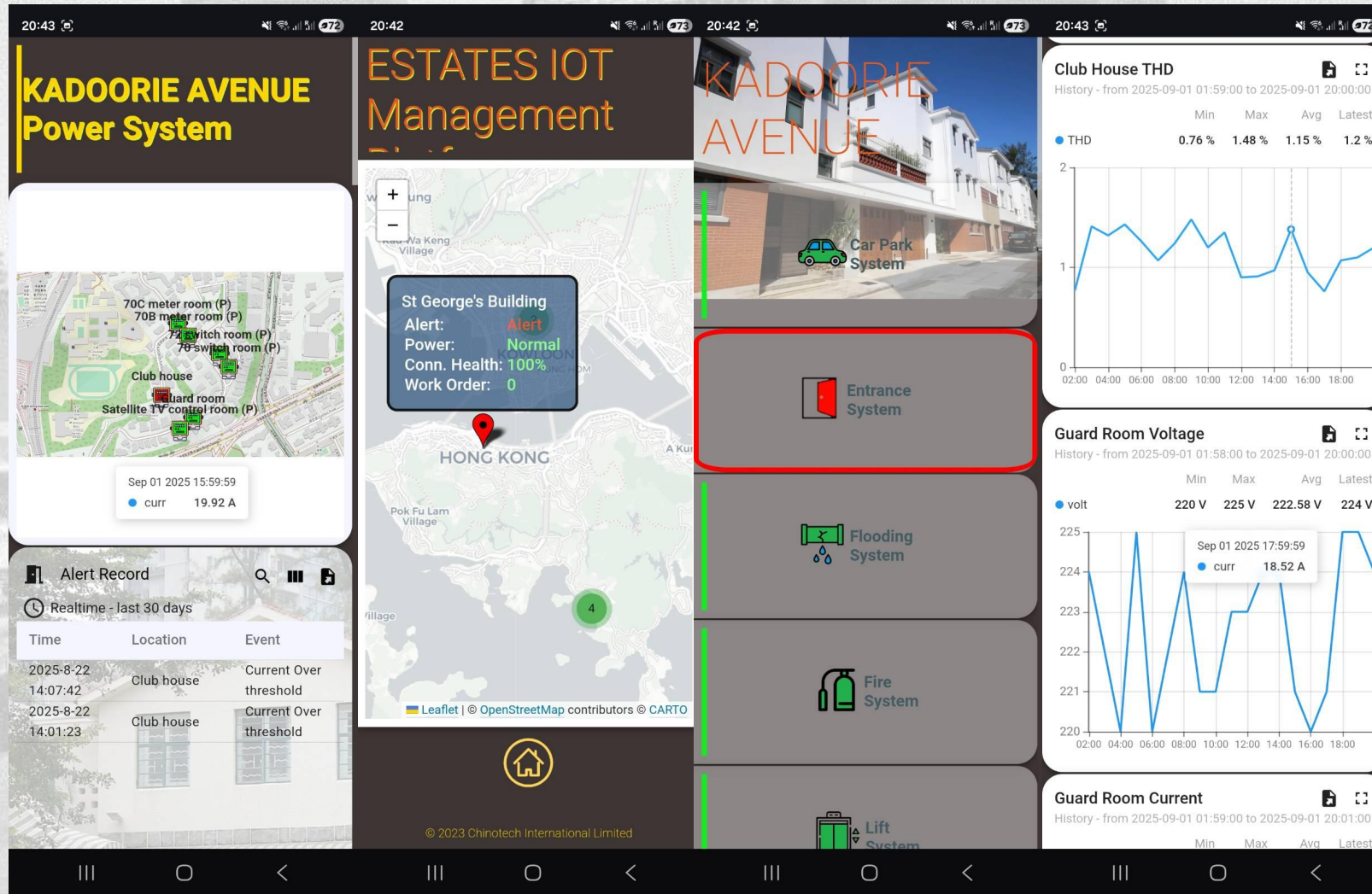
m3

Last year 上年

11.09

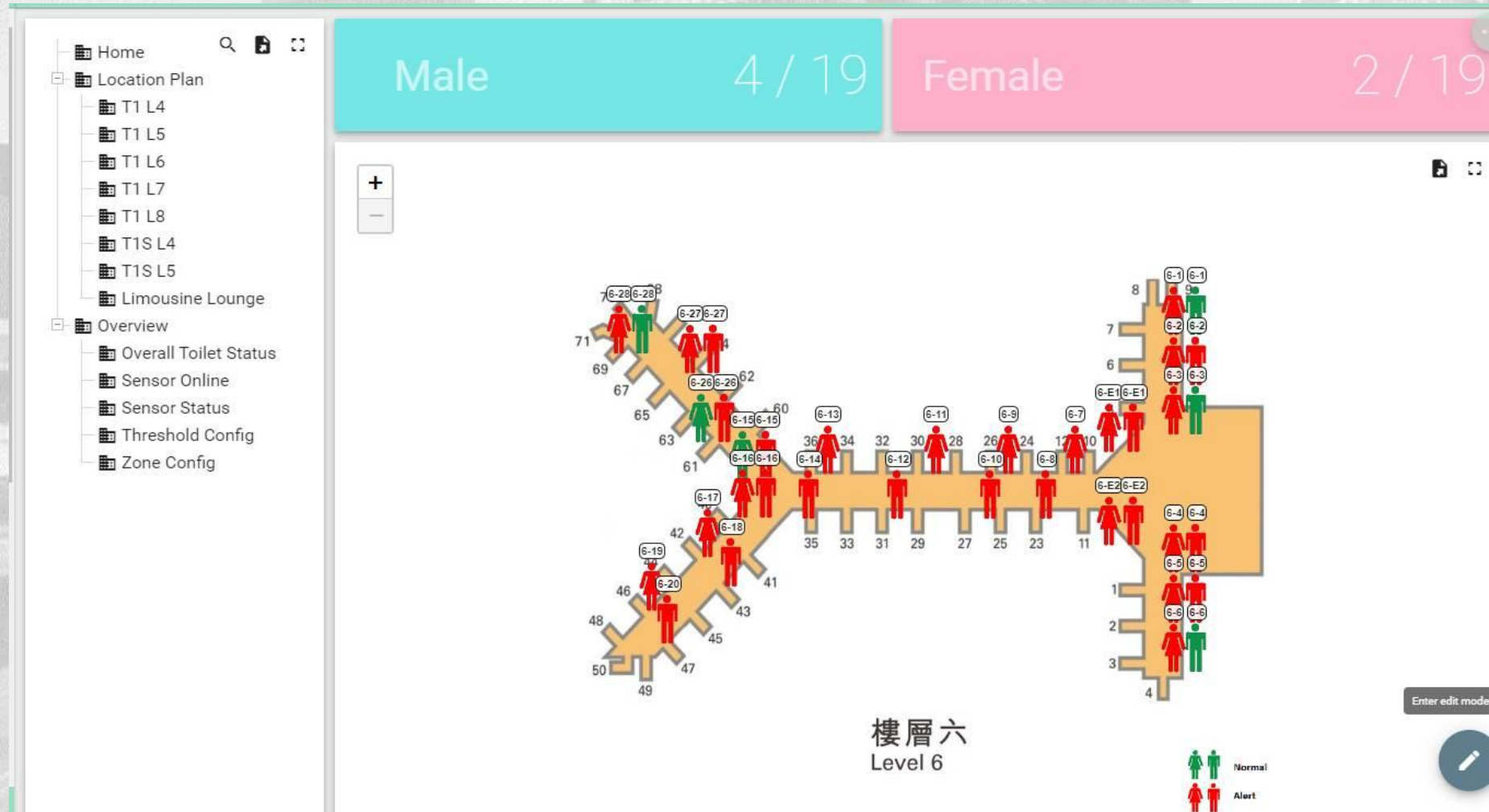
m3

App

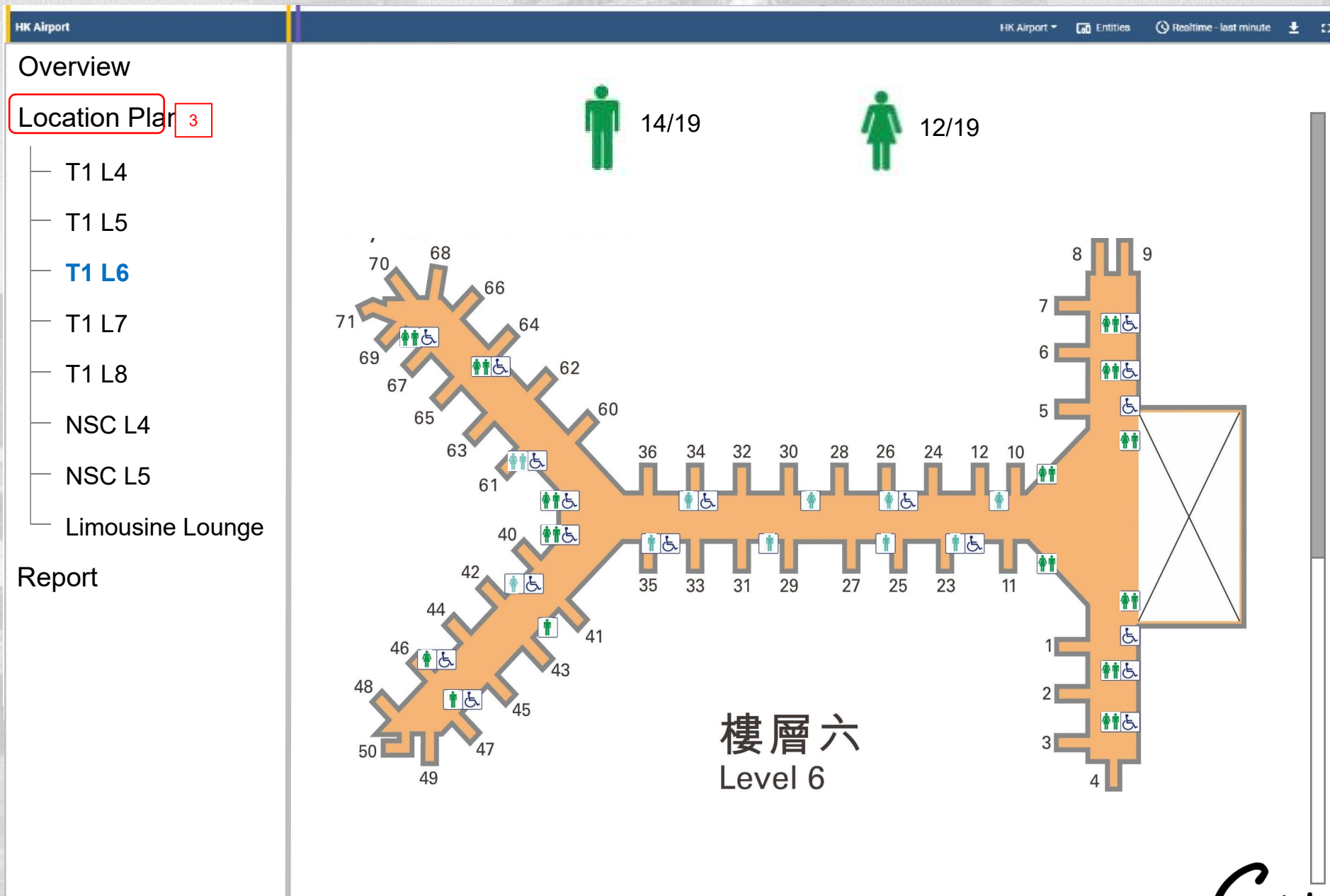


Dashboard Designs - Smart Facility Management Platform

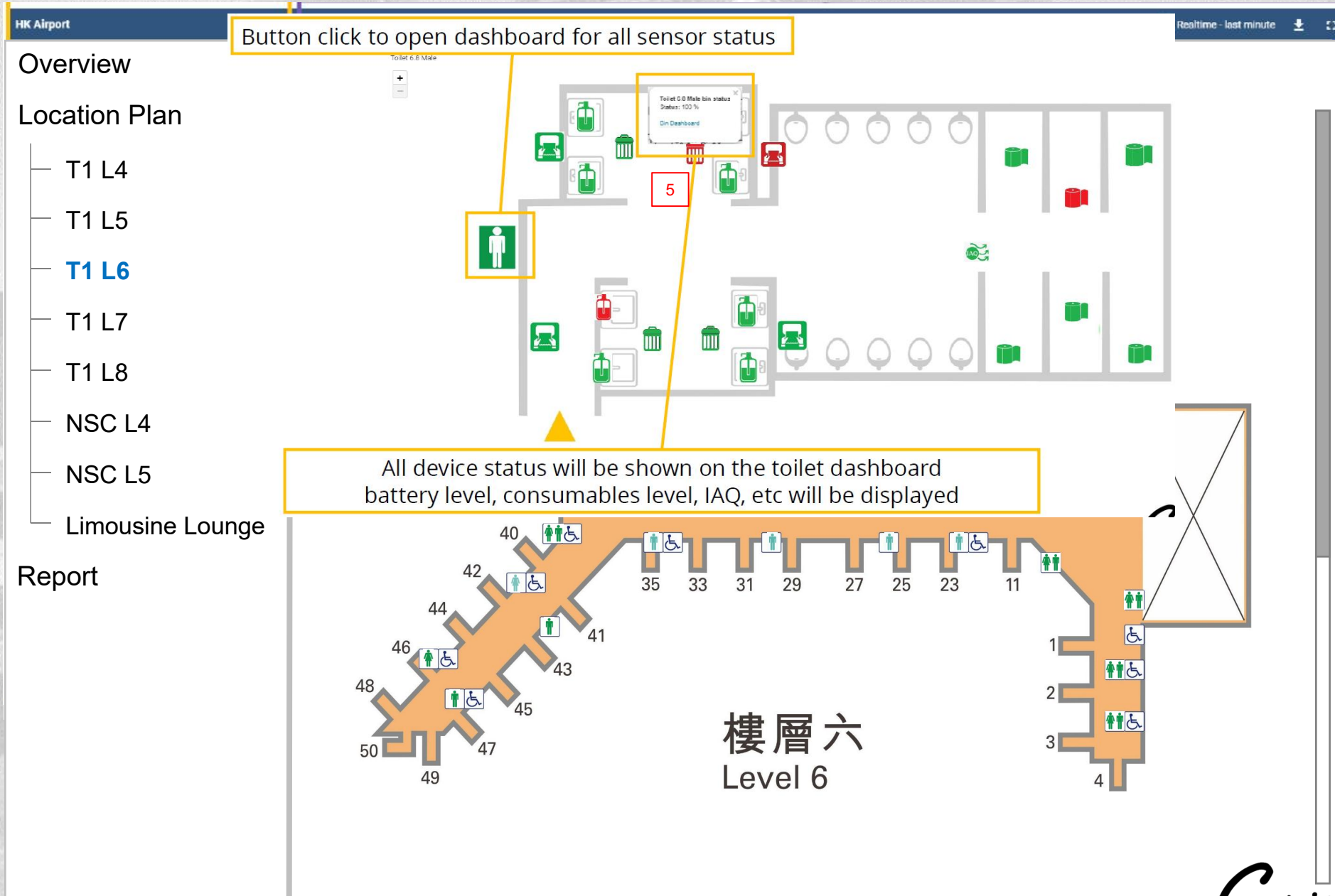
Dashboard for Smart Toilet System



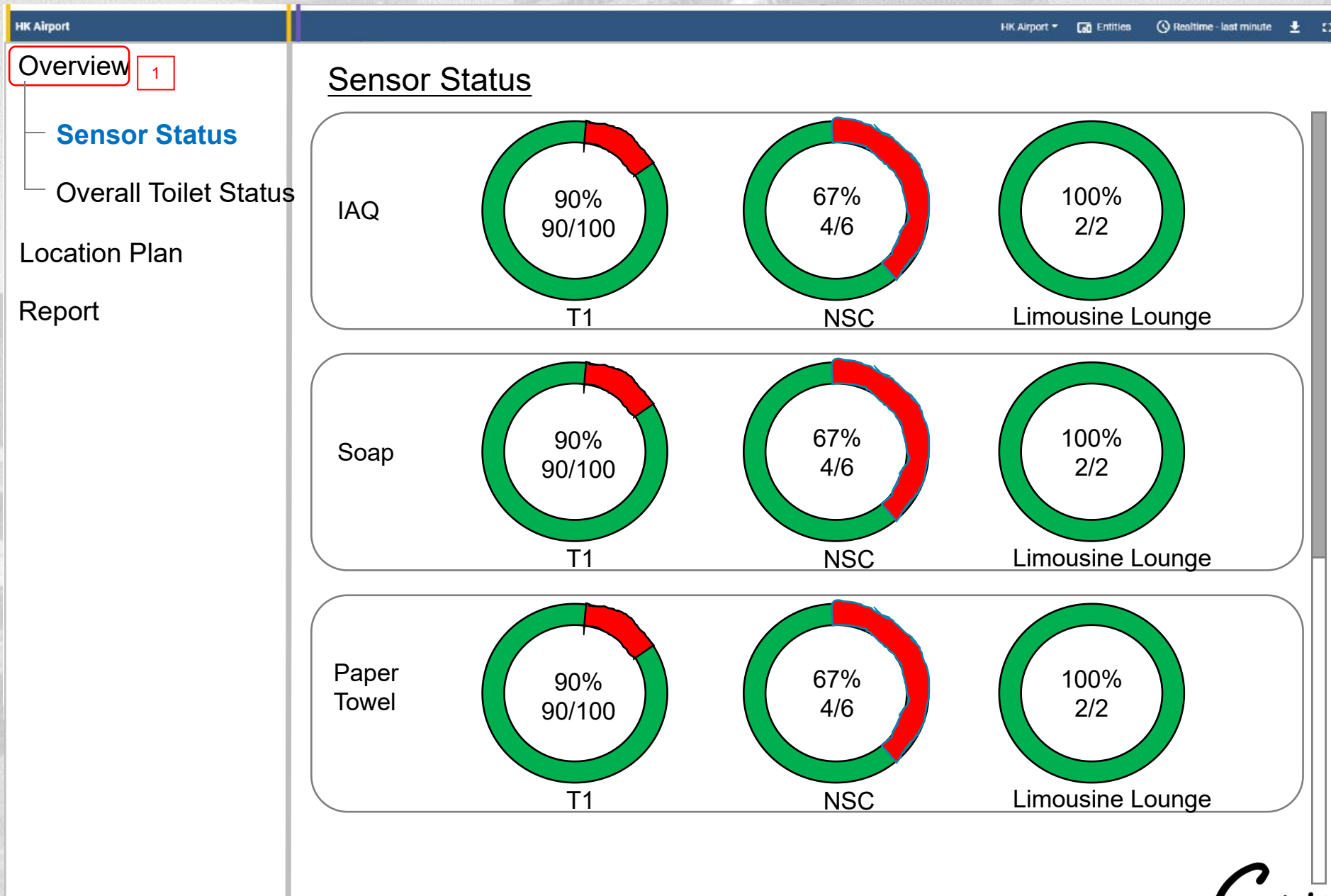
Sample Screen for Mapview



Real time status icon



Example dashboard for status summary, By Location (2000+ sensors)



Overview - Sensor Status Sample Screen, By Sensor Type



Sample dashboard widget for sensor status

HK Airport

HK Airport ▾ 30 Entities ⌚ Realtime - last minute ⬇️ ⌕

Overview 2

Sensor Status

Real-time Alert Status

Location Plan

Report

Real-time Alert Status (alert up = % up)

Location ▾	Toilet ▾	Bin ▾	Paper ▾	Soap ▾	Jumbo Roll ▾	IAQ ▾
T1 L5	5.1M	50%	80%	45%	52%	10%
T1 L5	5.1F	100%	10%	20%	25%	10%
T1 L5	5.2M	30%	0%	0%	10%	15%
T1 L5	5.2F	20%	21%	48%	54%	42%
T1 L5	5.3M	30%	0%	0%	10%	15%
T1 L5	5.3F	20%	21%	48%	54%	42%

(Table can be sorted by sensor alert %)

$$\% = \frac{\text{nos. of sensors in alert level}}{\text{total nos. of sensors installed}} \times 100\%$$

Analytic - Sample Screen for Real Time Alert Status

— — —

Click Column Title to sort

Real-time Alert Status					
IAQ status ▾ Entities ⌕ Realtime - last minute ⌵ ⌵					
Toilet ↑	Bin	Paper Towel	Soap level	Jumbo roll	IAQ
T1-4-3F_JAQ	28.8 %	54.2 %	28.8 %	54.2 %	28.8 %
T1-4-3M_JAQ	30.2 %	55.5 %	30.2 %	55.5 %	30.2 %
T1-4-4F_JAQ	28.1 %	54.2 %	28.1 %	54.2 %	28.1 %
T1-4-4M_JAQ	30.4 %	48.9 %	30.4 %	48.9 %	30.4 %
T1-5-10F_JAQ	28.1 %	64.6 %	28.1 %	64.6 %	28.1 %
T1-5-10M_JAQ	27.4 %	62 %	27.4 %	62 %	27.4 %
T1-5-13F_JAQ	25.6 %	52.1 %	25.6 %	52.1 %	25.6 %
T1-5-13M_JAQ	0 %	0 %	0 %	0 %	0 %
T1-5-14F_JAQ	26.4 %	53.6 %	26.4 %	53.6 %	26.4 %
T1-5-14M_JAQ	26.3 %	51.9 %	26.3 %	51.9 %	26.3 %
T1-5-15F_JAQ	23.5 %	64.3 %	23.5 %	64.3 %	23.5 %
T1-5-15M_JAQ	24.7 %	60.8 %	24.7 %	60.8 %	24.7 %
T1-5-16F_JAQ	79 %	5 %	79 %	5 %	79 %
T1-5-16M_JAQ	25.7 %	57.4 %	25.7 %	57.4 %	25.7 %

Real-time Alert Status					
IAQ status ▾ Entities ⌕ Realtime - last minute ⌵ ⌵					
Toilet	Bin	Paper Towel	Soap level ↓	Jumbo roll	IAQ
T1-5-16F_JAQ	79 %	5 %	79 %	5 %	79 %
T1-NSC-5F_JAQ	30.9 %	61.4 %	30.9 %	61.4 %	30.9 %
T1-4-4M_JAQ	30.4 %	49 %	30.4 %	49 %	30.4 %
T1-4-3M_JAQ	30.2 %	55.6 %	30.2 %	55.6 %	30.2 %
T1-6-16M_JAQ	29.3 %	49.6 %	29.3 %	49.6 %	29.3 %
T1-6-15F_JAQ	29.2 %	50.3 %	29.2 %	50.3 %	29.2 %
T1-6-18M_JAQ	29 %	58.6 %	29 %	58.6 %	29 %

Sorting example - Soap

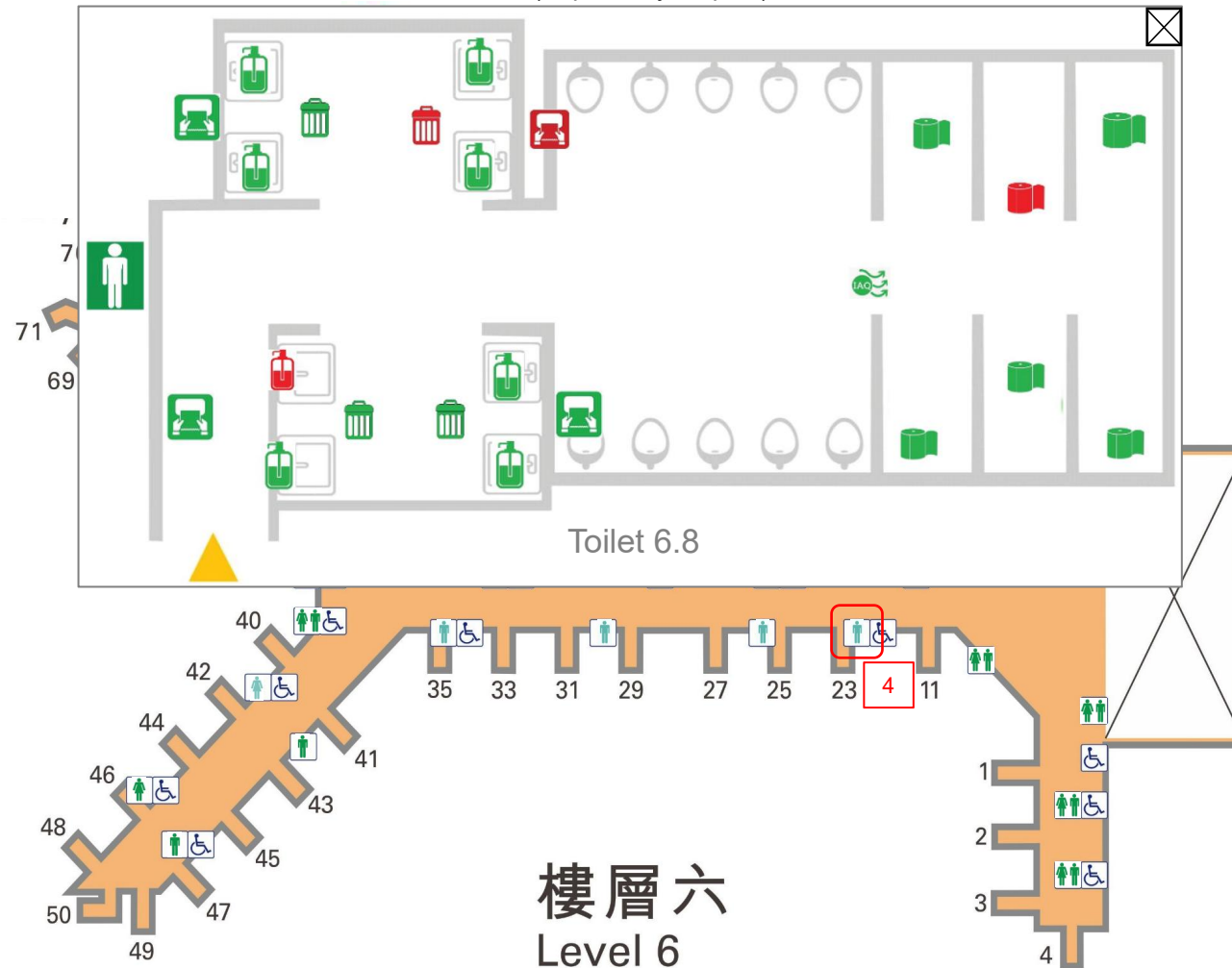
Overview

Location Plan

- T1 L4
- T1 L5
- T1 L6**
- T1 L7
- T1 L8
- NSC L4
- NSC L5
- Limousine Lounge

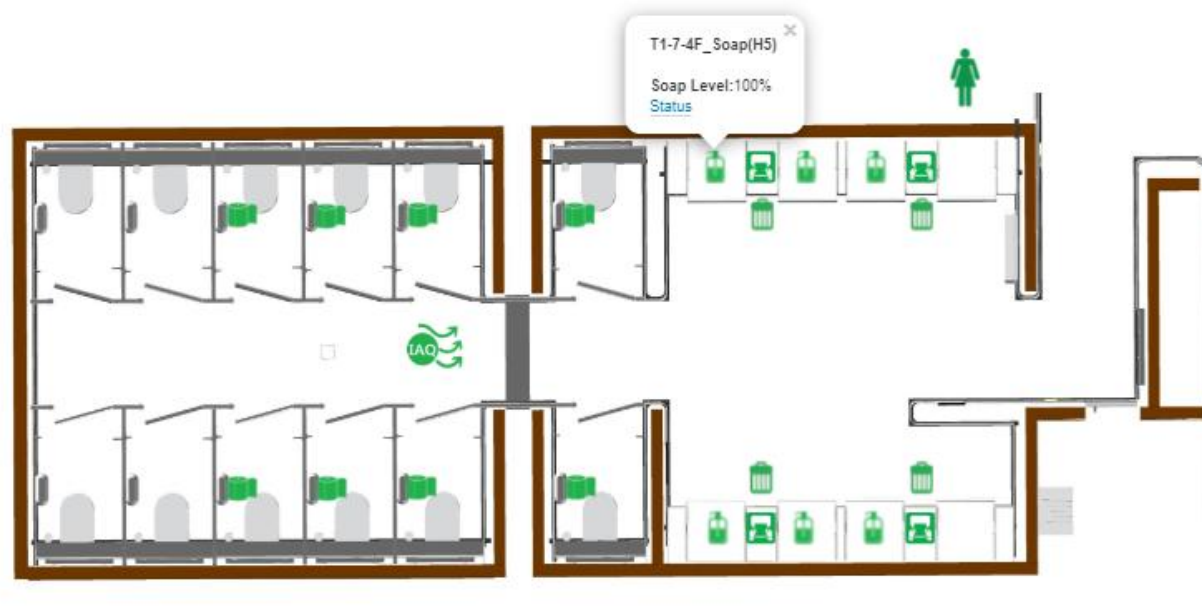
Report

(Pop out layout plan)



Click icon to show link

T1-7-4F



Device Specific Dashboard

HK Airport

HK Airport ▾ 30 Entities ⌚ Realtime - last minute ⬇️ ⌵

Overview

Location Plan

— T1 L4

— T1 L5

— **T1 L6**

— T1 L7

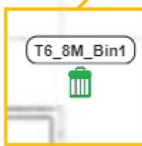
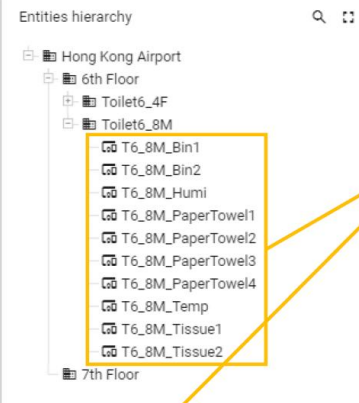
— T1 L8

— NSC L4

— NSC L5

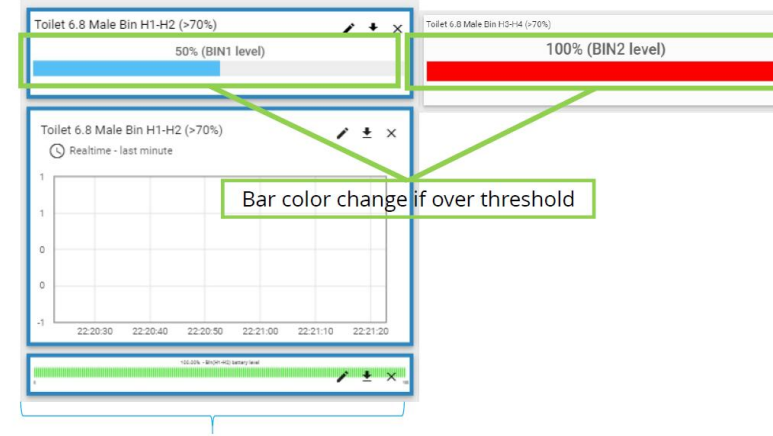
— Limousine Lounge

Report



Device Dashboard

Clicking the device icon in toilet dashboard or the device in the drop down list enters the device dashboard
All the same type of device in the same toilet will be displayed

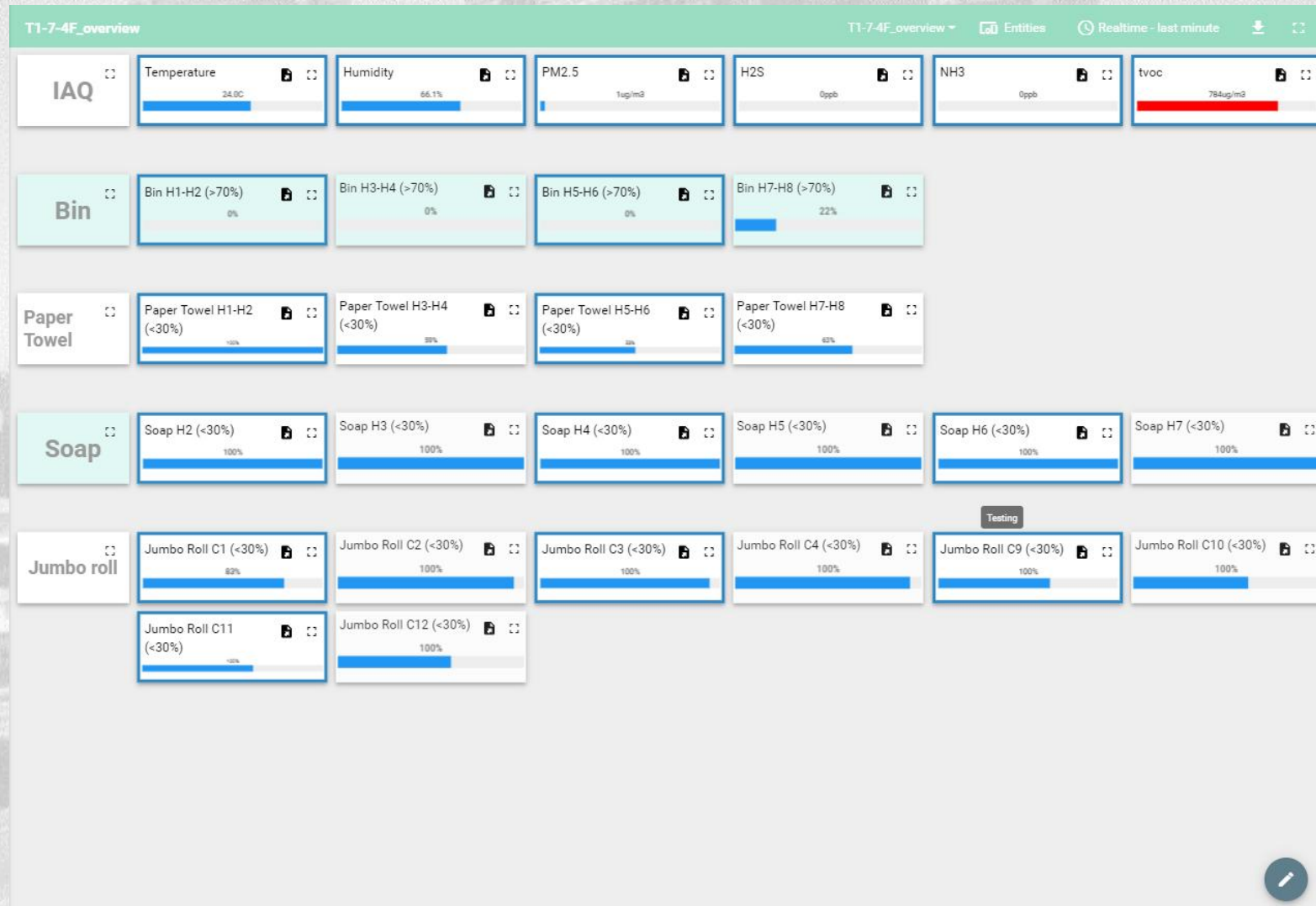


Highlighted and grouped widget for 1 sensor

CHINOINT

CHINOINT
SENSE CONNECT

Toilet overall sensors status



Analytic for Alert Notification

HK Airport

HK Airport ▾ Entities Realtime - last minute

Overview

Location Plan

Report 6

Alert Notification Summary

Alert Response Summary

Alert Notification Summary

☒ Time period

Date from 06 / 22 / 2021 Time from 05 : 24 PM

Date to 06 / 23 / 2021 Time to 05 : 24 PM

Location	Toilet	IAQ	Soap				Bin			Paper Towel			Jumbo Roll			
			H1	H2	H3	Avg. alert rate	H1-H2	H3-H4	Avg. alert rate	H1-H2	H3-H4	Avg. alert rate	C1	C2	C3	Avg. alert rate
T1 L5	5E2 M	3	1	2	9	4	2	2	2	2	2	2	0	0	0	0
T1 L5	5E2 F	1	8	1	5	4.67	4	4	4	4	4	4	0	0	0	0
T1 L6	6.1M	2	5	2	2	3	2	5	3.5	2	5	3.5	0	0	0	0
T1 L6	6.1F	10	6	5	2	4.33	8	N/A	8	8	N/A	8	0	0	0	0
T1 L6	6.2M	5	3	8	N/A	5.5	6	N/A	6	6	N/A	6	0	0	0	0
T1 L6	6.2F	3	2	6	4	4	7	8	7.5	7	8	7.5	0	0	0	0
T1 L6	6.3M	8	1	1	5	2.33	2	9	5.5	2	9	5.5	0	0	0	0
NSC L4	T01 M	3	4	2	N/A	3	0	N/A	0	0	N/A	0	0	0	0	0
NSC L4	T02F	3	8	3	N/A	5.5	0	N/A	0	0	N/A	0	0	0	0	0
Limousine Lounge	3L009 M	5	5	4	NA	4.5	0	NA	0	0	NA	0	0	0	0	0

Alert Response Summary

HK Airport

HK Airport Entities Realtime - last minute

Overview

Location Plan

Report 7

Alert Notification Summary

Alert Response Summary

Alert Response Summary

☒ Time period

Date from

06 / 22 / 2021

Time from

05 : 24 PM

Date to

06 / 23 / 2021

Time to

05 : 24 PM

Location: T1 L6 Toilet: 6.8M Sensor: Bin H1-H2

<u>Alert Start</u> ▾	<u>Alert Ends</u> ▾	<u>Response Time</u> ▾
05:30pm	06:30pm	60 mins
08:00pm	08:10pm	10 mins
09:45pm	10:00pm	15 mins

Event Log

Alarm Log Record



🕒 Realtime - last 30 days

Timestamp ↓	Alarm	Probe1
2024-02-09 11:08:35	WL-TKO-1F-001	Alarm
2024-02-09 11:03:31	WL-TKO-1F-001	Alarm
2024-02-09 10:58:26	WL-TKO-1F-001	Alarm
2024-02-09 10:53:22	WL-TKO-1F-001	Alarm
2024-02-09 10:48:17	WL-TKO-1F-001	Alarm
2024-02-09 10:43:13	WL-TKO-1F-001	Alarm

Items per page:

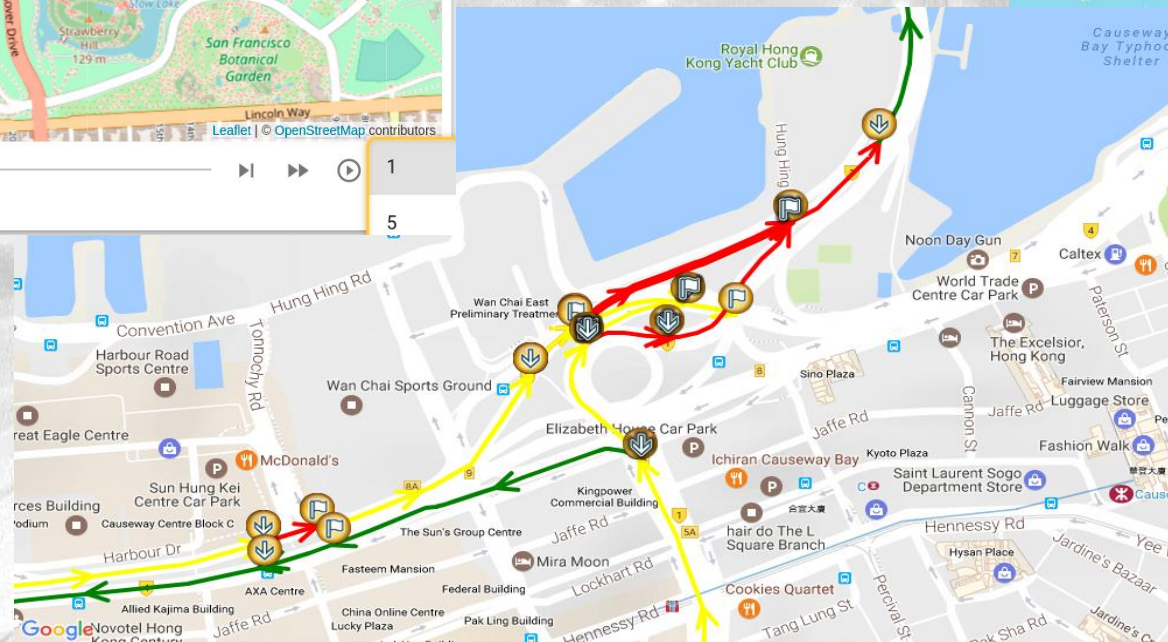
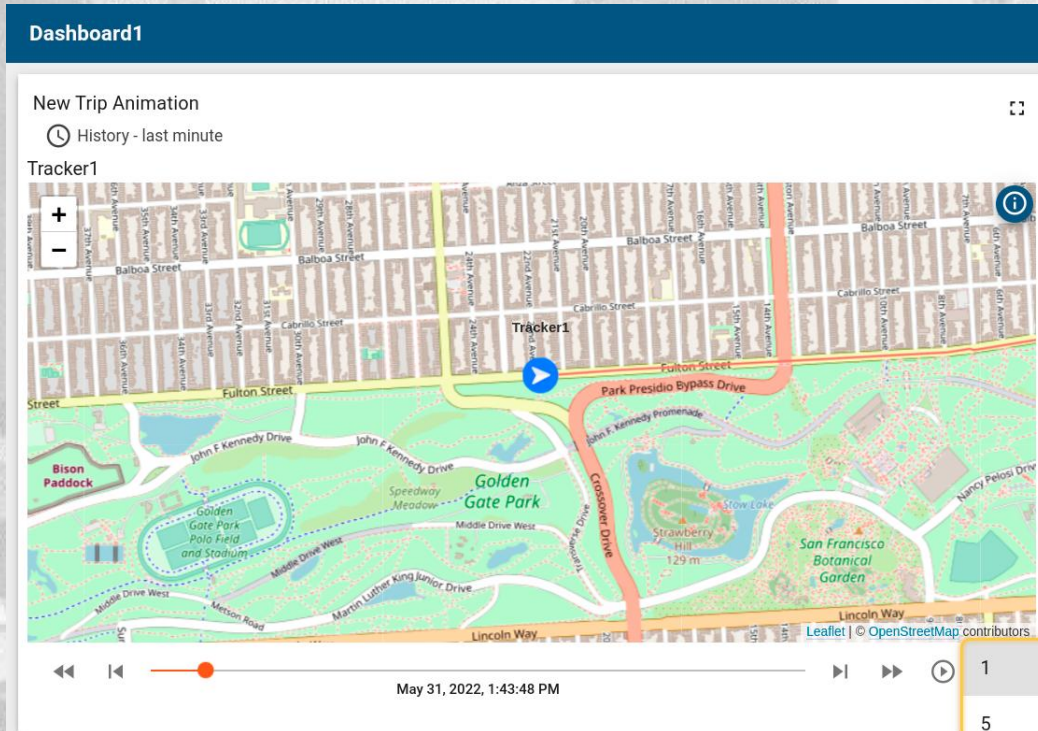
10



1 - 10 of 39



Google Map Integration

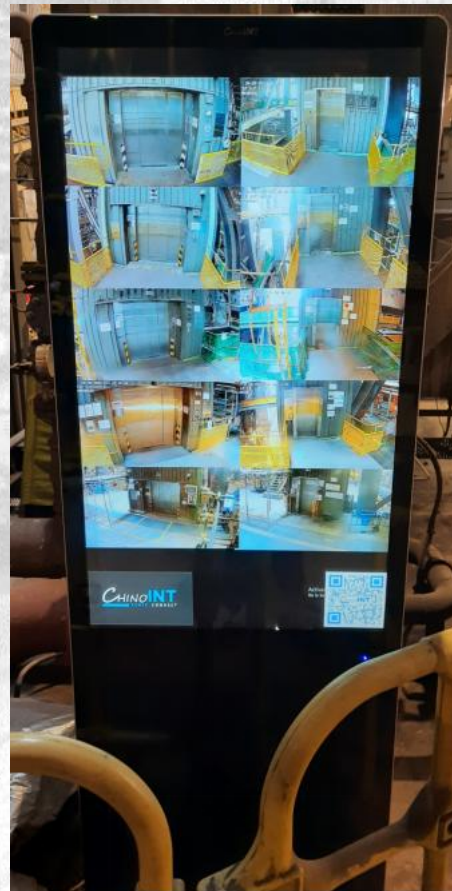


More Dashboard Examples

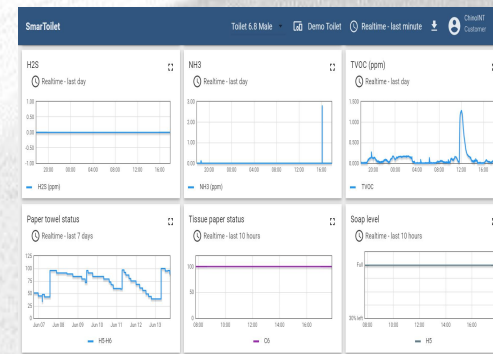


Dashboard for Site Monitoring & Video Streaming

Clean and clear dashboarding is one of the key element in an IoT system. The ChinoINT IOT platform provides easy to use dashboard, with multi-layer user account settings. GUI Maintenance Portal is provided with the platform. Both desktop and mobile version (Android and IOS) are available.



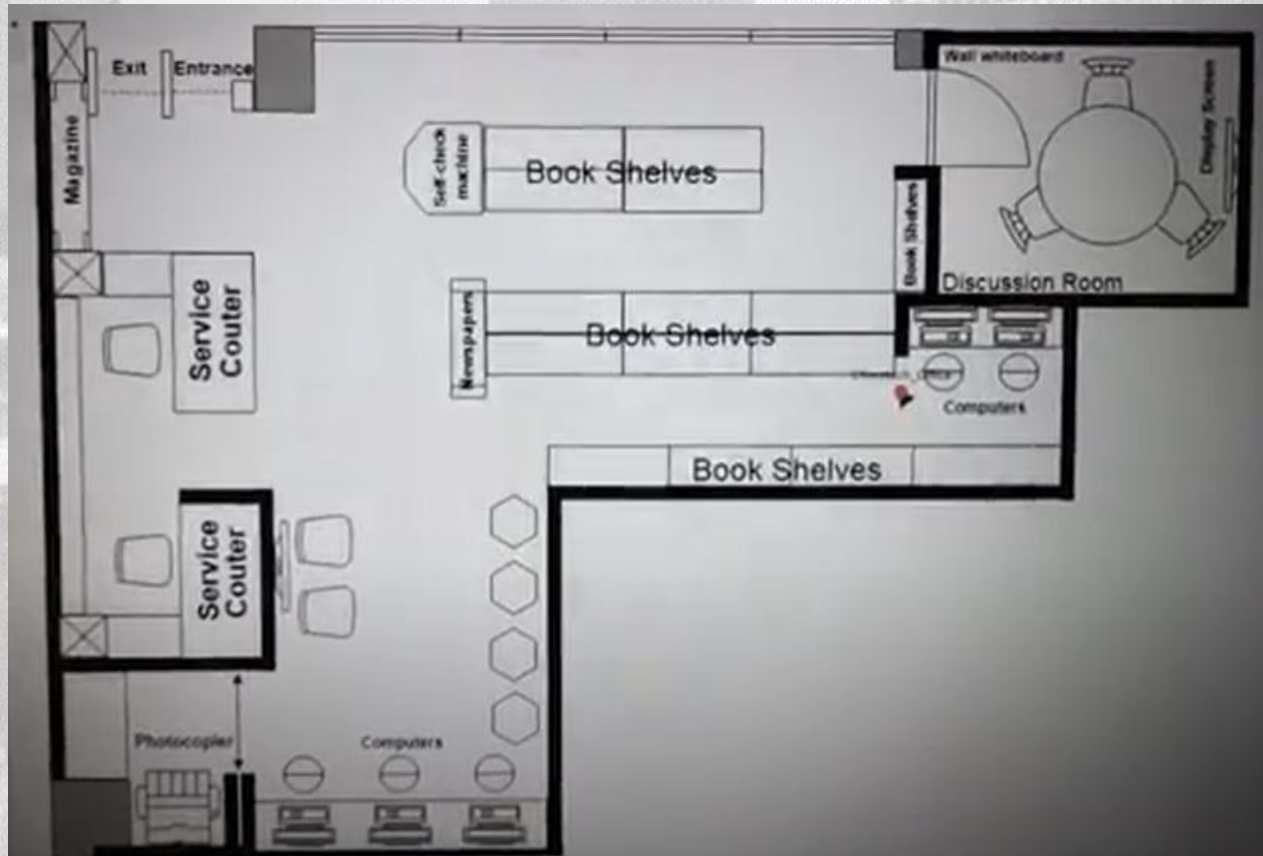
溫度 Temperature: 24.0°C 相對濕度 Relative Humidity 50.0%



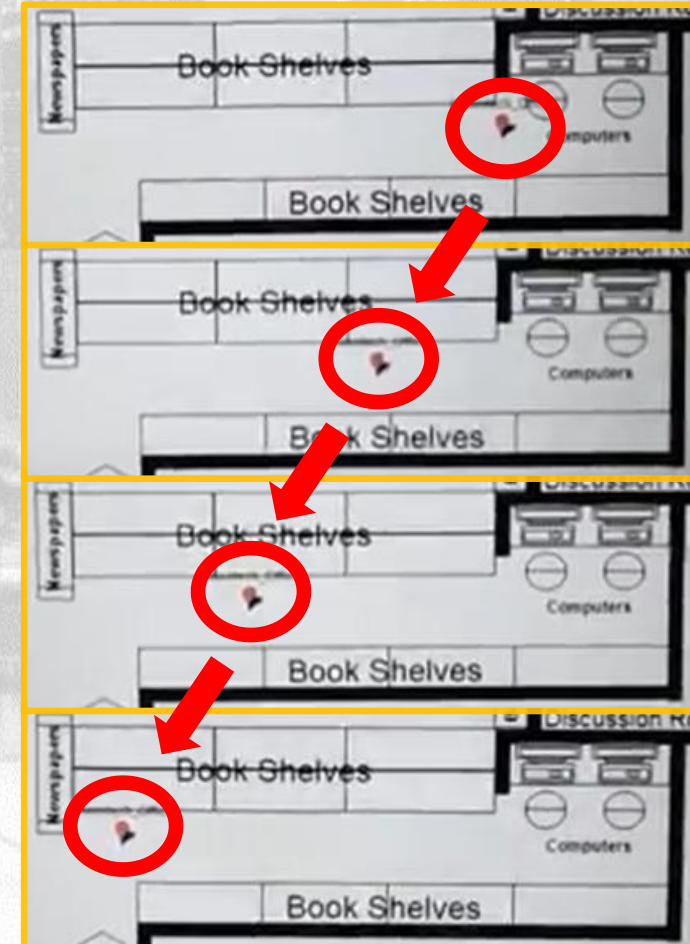
Dashboard for Real Time Location System (RTLS)



Real Time GUI for asset and people tracking
Easy to use interface




Real Time Tracking




Dashboard for Fall Detection System

Dashboard: Overall statue

Event Log



ChinoINT Fall Detection Monitoring Platform



Accessible Toilet Real Time Status

Sensor Name ↑	Status	Occupancy	Overstay	ST Motionless	Motionless	ST fall	Fall	Last Update Time
1/F accessible toilet 101	●	Available	●	●	●	●	●	18/05/2024 18:38:25
1/F accessible toilet 102	●	Occupied	●	●	●	●	●	18/05/2024 18:38:22
2/F accessible toilet 201	●	Occupied	●	●	●	●	●	18/05/2024 18:38:34
3/F accessible toilet 301	●	Occupied	●	●	●	●	●	18/05/2024 18:38:22
5/F accessible toilet 501	●	Occupied	●	●	●	●	●	18/05/2024 18:38:31


Fall Down

Timestamp ↓	sensor	Event	Category
2024-05-19 10:15:33	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:17:23	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:15:50	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:14:04	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:04:52	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:03:51	5/F accessible toilet 501	Fall Down Alarm	●

Eg.1 Type “Fall Down”, it will list all “Fall Down Alarm” event

LOG

Accessible Toilet Sensor Log Demo units.




Sensor Alarm Log

Realtime - Current half year

Timestamp ↓	sensor	Event	Category
2024-05-19 10:15:33	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-19 10:14:59	3/F accessible toilet 301	Overstay Alarm	●
2024-05-19 10:14:36	1/F accessible toilet 102	Motionless Alarm	●
2024-05-19 10:13:07	2/F accessible toilet 201	Short Term Motionless Alarm	●
2024-05-19 10:12:19	1/F accessible toilet 102	Motionless Alarm	●
2024-05-18 19:17:23	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:15:50	5/F accessible toilet 501	Fall Down Alarm	●
2024-05-18 19:14:04	5/F accessible toilet 501	Fall Down Alarm	●

Items per page: 10 1 - 10 of 26



Search

Category

●

●

Log support “Search” feature

Dashboard for Fall Detection System

Messenger App notification - Telegram

Eg.2 Type “2/F accessible toilet 201”, it will list only that sensor event

2/F accessible toilet 201

Timestamp ↓	sensor	Event	Category
2024-05-19 10:13:07	2/F accessible toilet 201	Short Term Motionless Alarm	
2024-05-18 17:45:25	2/F accessible toilet 201	Short Term Motionless Alarm	

mo units.

Notification

Mark all as read

New alarm 'Fall Alarm (跌倒警報)'

5/F accessible toilet 501 - Someone Fall detected [發現有人跌倒]

Just now

✓

Critical

View all

Fall

lastActivityTime

System notification: onscreen alert when alarm arises

FA

Fall Detection Monitoring Platform Administrator

2 members

ChinoInt

[2024/05/19 11:25:25] 5/F accessible toilet 501 Fall Alarm (5/F accessible toilet 501 跌倒警報)

11:25 AM

[2024/05/19 11:26:11] 1/F accessible toilet 101 Fall Alarm (1/F accessible toilet 101 跌倒警報)

11:26 AM

[2024/05/19 11:26:32] 2/F accessible toilet 201 Fall Alarm (2/F accessible toilet 201 跌倒警報)

11:26 AM

[2024/05/19 11:26:52] 3/F accessible toilet 301 Fall Alarm (3/F accessible toilet 301 跌倒警報)

11:26 AM

[2024/05/19 11:27:13] 1/F accessible toilet 102 Fall Alarm (1/F accessible toilet 102 跌倒警報)

11:27 AM

Message

Export data to CSV...

Export data to XLS...

Export data to XLSX...

Export as PDF

Export as PNG

Export as JPEG

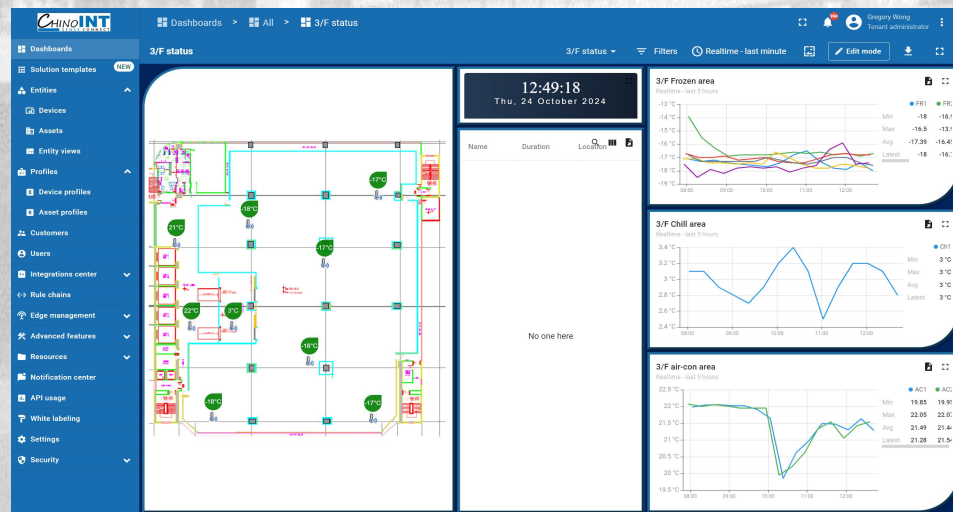
Export JSON configuration

Data & Report

Warehouse and Walk-in Freezer Monitoring - DSV

For this client, they operate walk-in freezer and warehouse. Staff have to work in a cold and enclosed spaces all the time. To keep their staff safe and with ZERO incidence, they invited ChinoINT to design a RTLS for that is suitable for their entire warehouse building.

The most important features are the real time location tracking, and environment monitoring.



Staff: Vincent
Location: Zone 2
dwell time: 17 min
Status: Normal

Staff: Gregory
Location: Zone 4
dwell time: 53 min
Status: Normal



Solutions & References



Smart Solutions Done Smartly

Region	Name	End user	Year of Completion
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2020
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2019
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2022
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2022
Hong Kong	SSSS - Turbine Work Safety Video Analytic	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Personnel management for containers during COVID	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Nga Ying Decoration Ltd	2023
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Por Mee Factory Building	2023
Hong Kong	SSSS - UWB-enabled Collision Avoidance System for Vehicle	SUEZ - IWTS	2021
Hong Kong	Smart Metering - LoRaWan (POC)	SUEZ - IWTS	2021
Hong Kong	Smart Toilet - LoRaWan	Hong Kong International Airport	2022
Hong Kong	Smart Toilet - LoRaWan (POC)	Poly University	2021
Hong Kong	Smart Facility Management - LoRaWan @ M+	ASD	2021
Hong Kong	Smart Facility Management - LoRaWan	Kadoorie Estates Limited	2020-2023
Hong Kong	IOT Hub	Kai Tak Sports Park	2023
Macau	Smart Elderly Center - Zigbee	Vila Medalena Macau	2019
Hong Kong	Smart Metering	Poly U	2020
Hong Kong	Smart Toilet	Poly U	2022
Hong Kong	Smart Facility Management - Water leakage Detection	Queensway Government Office	2022
Hong Kong	Smart Visitor Management - People Counting	Hong Kong U	2020
Hong Kong	Smart Facility Management Notification Platform	Queensway Government Office	2023
Hong Kong	Smart Chiller Plant Monitoring	EMSD	2022
Hong Kong	Smart Chiller Plant Monitoring	EMSD	2023
Hong Kong	Smart Chiller Plant Monitoring	Poly U	2023

Reference - Facility Management

Region	Name	End user	Year of Completion
Hong Kong	Smart Metering - LoRaWan	SUEZ - IWTS	2021
Hong Kong	Smart Toilet - LoRaWan	Hong Kong International Airport	2022
Hong Kong	Smart Facility Management - LoRaWan	M+ - ASD	2021
Hong Kong	Smart Facility Management - LoRaWan	Kadoorie Estates Limited	2020-2023
Hong Kong	IOT Hub	Kai Tak Sports Park	2023
Hong Kong	Smart Metering	Poly U	2020
Hong Kong	Smart Toilet	Poly U	2022
Hong Kong	Smart Facility Management - Water leakage Detection	Queensway Government Office	2022
Hong Kong	AI Pipe Blockage Detection	Legislation Council	2024
Hong Kong	Smart Chiller Plant - Yau Ma Tei Public Cargo smart switchboard	EMSD	2022
Hong Kong	Smart Chiller Plant - Po Ning Road Clinic Smart Switchroom	EMSD	2022
Hong Kong	Smart Chiller Plant - Hong Kong Heritage Museum	EMSD	2023
Hong Kong	Smart Chiller Plant - Digitalisation of switchrooms at Lockhart Road MSB	EMSD	2023
Hong Kong	Smart Chiller Plant - Hong Kong Museum of Coastal Defense	EMSD	2023
Hong Kong	Smart Chiller Plant & AI Pipe Blockage Detection	Poly U	2023



AI Pipe Blockage Detection - Legislation Council & Poly U



Readily Deployed Solution

ChinoINT Pipe Blockage Detection system has been deployed in Hong Kong, including local university and commercial buildings



Smart Chiller Plant and Switch Room Monitoring - EMSD & Poly U



Project Background

To maintain the environment safety and real time monitoring

Project Description

LoRaWan air quality sensors including Chlorine sensors are deployed. LoRaWan sensors such as people counter, water leakage, piep monitoring are being installed.

ChinoINT successfully deployed a LoRaWan infrastructure and achieved the above goals.



Smart Facility Management - Kadoorie Management



Project Background

A Hong Kong Real Estates Company would like to deploy a IoT system to collect the building alarms from remote sites (services apartment)

Project Description

LoRa sensors/LoRa Nodes for dry contact are deployed at their main building and remote site buildings to collect the alarm for water leakage, temperature & RH, water level, CT. pipe pressure, etc and transfer the alarms to main office via Internet.

ChinoINT successfully deployed a LoRaWan infrastructure and achieved the above goals.

Queensway Government Office - Water Leakage Detection & GWIN Integration



Project Background

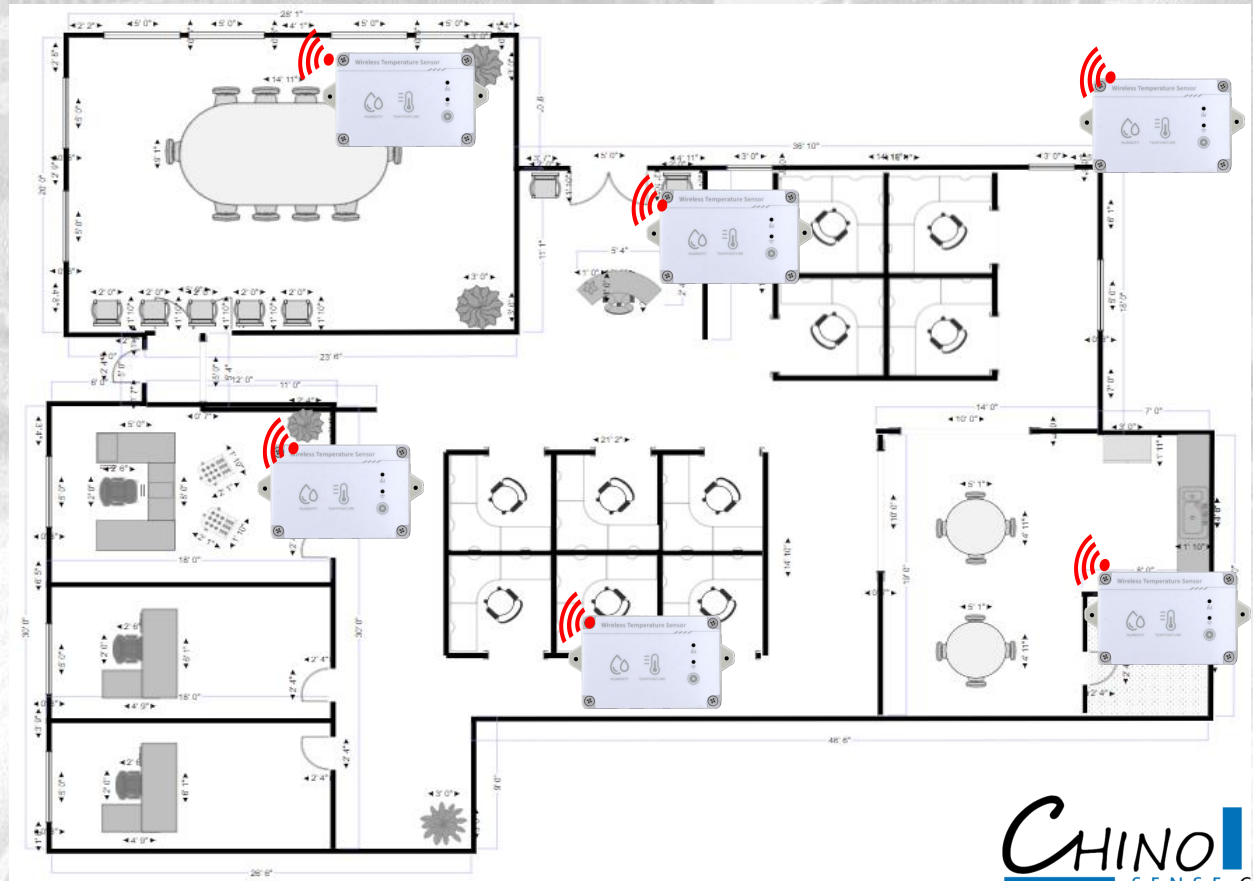
To deploy water leakage sensors and data integration to GWIN

Automated Air/Con Automation @ M+

ChinoINT masters on wireless technology.

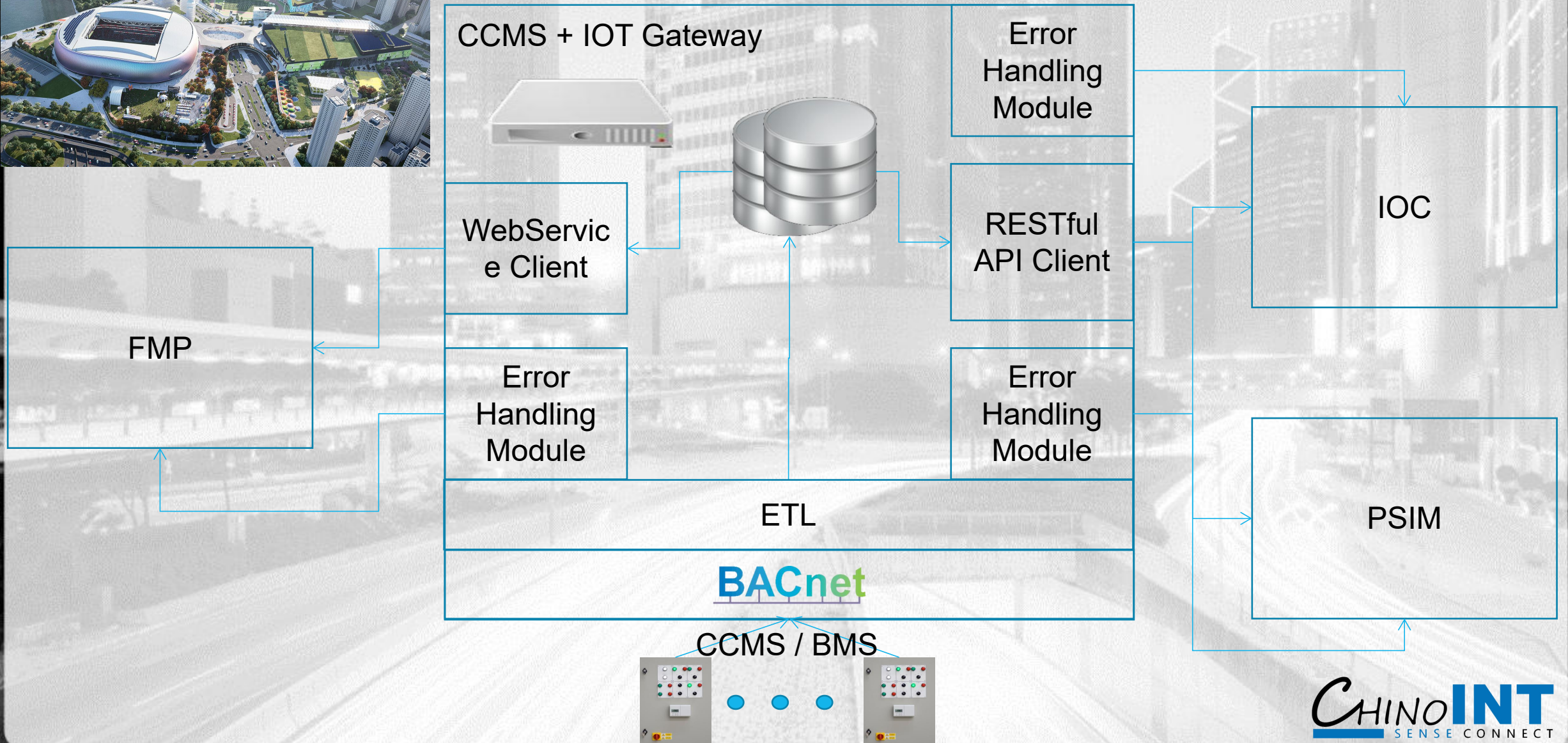
Temperature and humidity feeds to the IoT gateway.

Feedback to BMS and control HVAC locally





IOT Hub @ Kai Tak Sports Park



Smart Metering @ Transfer Station

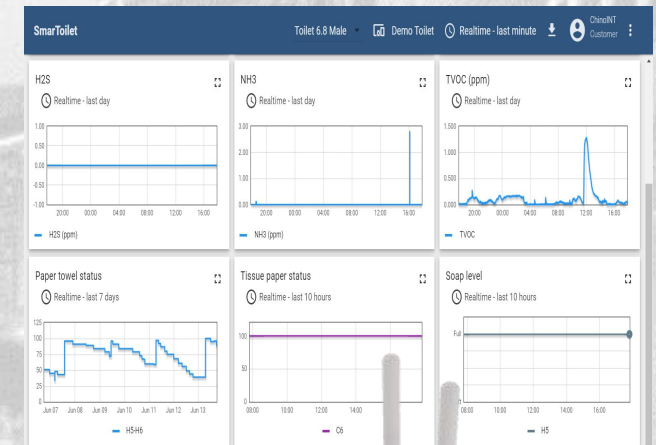
ChinoINT has show-cased our strengths in IOT technologies

We have enabled smart metering solution in Transfer Station in Hong Kong

Not only providing IOT metering with fully integrated dashboard with dashboard for real time and historical data, and also enabling real time analytic and alerts with extra values



LoRaWan Meter
Battery powered
(4.5 years battery life)



Reference - SSSS

Region	Name	End user	Year of Completion
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2020
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2019
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2022
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2022
Hong Kong	SSSS - Turbine Work Safety Video Analytic	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Personnel management for containers during COVID	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Nga Ying Decoration Ltd	2023
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Por Mee Factory Building	2023
Hong Kong	SSSS - UWB-enabled Collision Avoidance System for Vehicle	SUEZ - IWTS	2021



Video Analytic of SSSS - CLP



SSSS - Confined Space Management @ Power Plant & University



SSSS - Collision Avoiding System @ Transfer Station

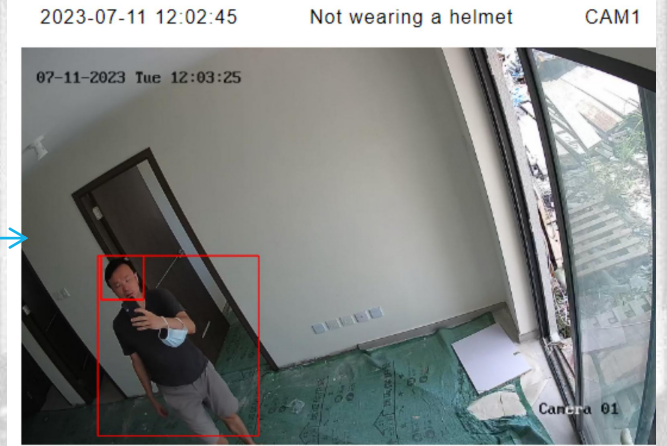
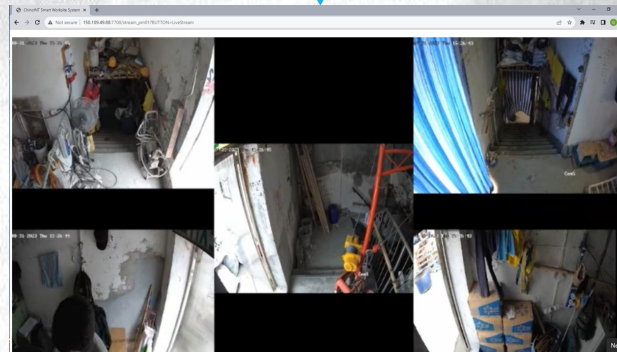
ChinoINT also masters on latest technology such as UWB to design real time monitoring system to raise safety to the next level



Rich functionality

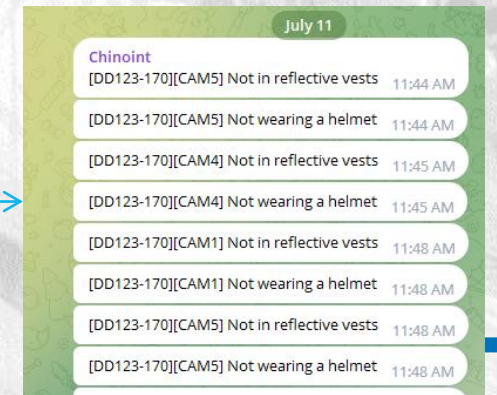
- Human face recognition
- human body recognition
- license plate recognition
- smoke and flame recognition
- helmet recognition
- phone calling recognition
- cigarette smoking
- gathering of people recognition
- work clothes recognition
- leaving work and sleeping recognition
- zone intrusion warning
- human fall recognition
- running recognition
- clothes color
- Fire escape blockage identification
- etc

SSSS - 5G AI Safety Monitoring

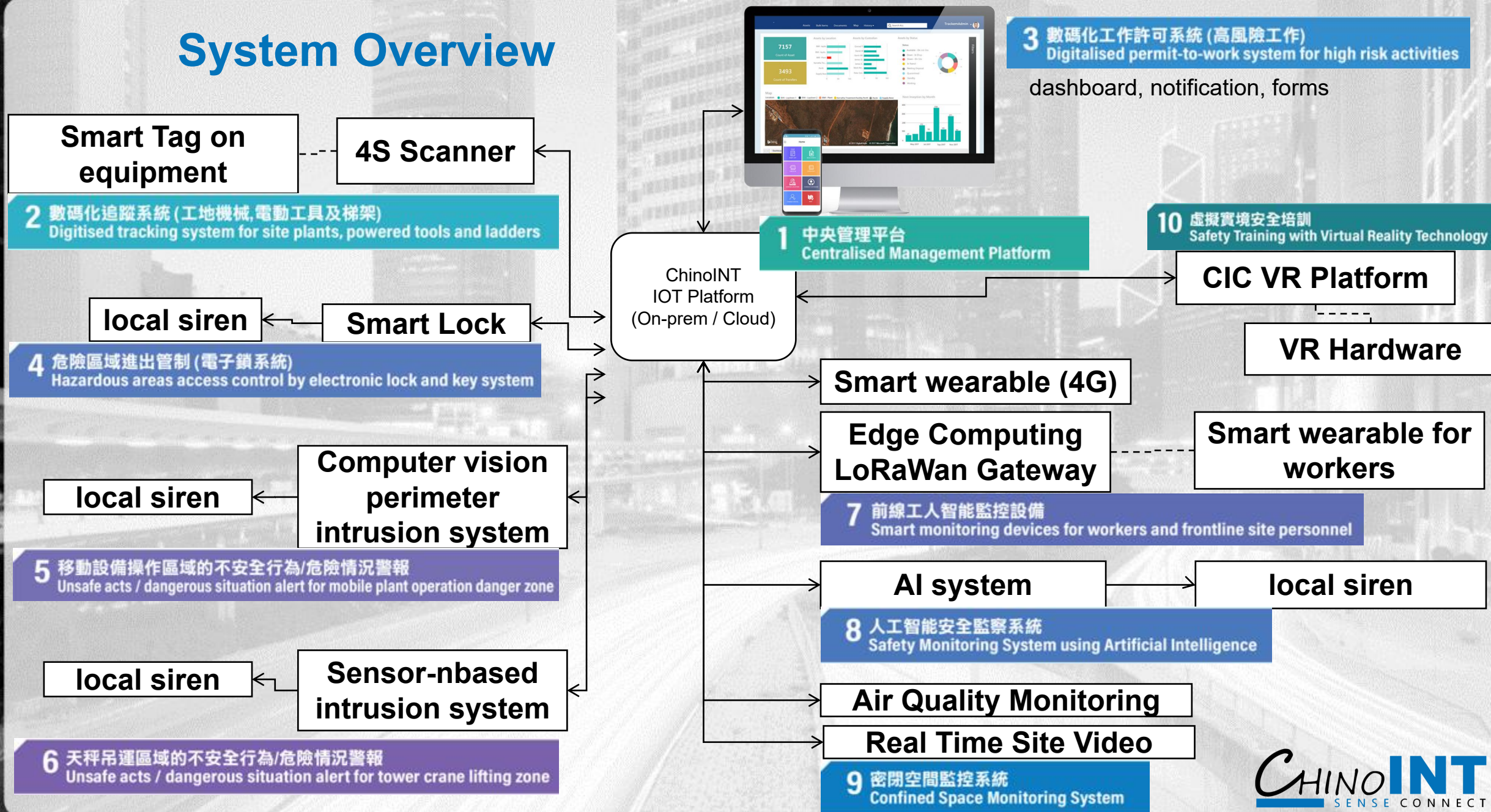


Platform alert: AI detects "not wearing a helmet" under CAM1

- Real time streaming
- APP Notification
- Evidence with photo



System Overview



CIC Pre-Approved Solutions

PA-722

AI construction site monitoring Box



- accuracy >95%
- upto 32 computer vision modules
- slim design
- all-in-one
- simple installation



Nga Ying Decoration Ltd
Por Mee Factory Building

PA-725

Vehicle Collision Avoidance System



- accuracy $\leq 10\text{cm}$
- detection range 0.1 to 100m
- easy installation
- local + APP notification



PA-698 (Pending)

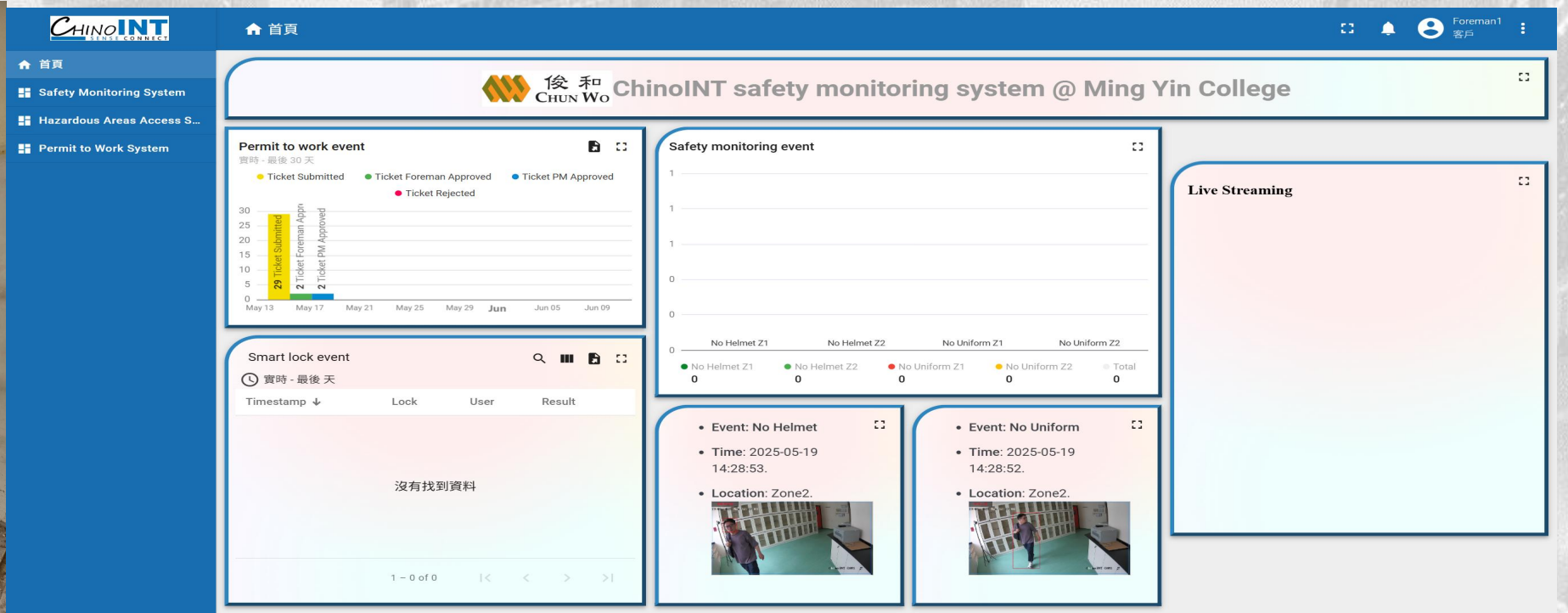
Confined Space Management System



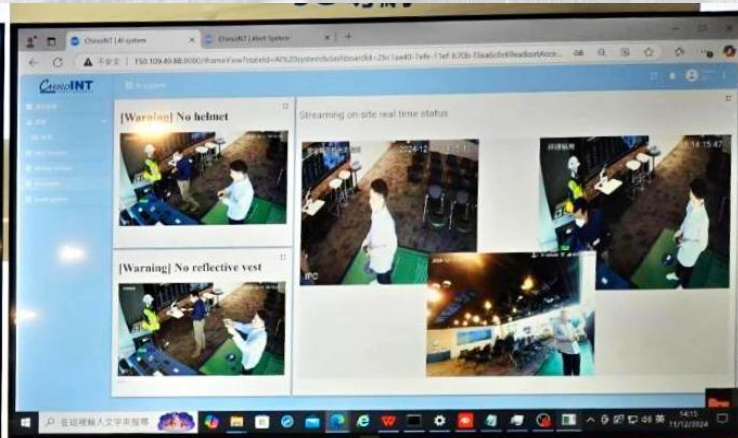
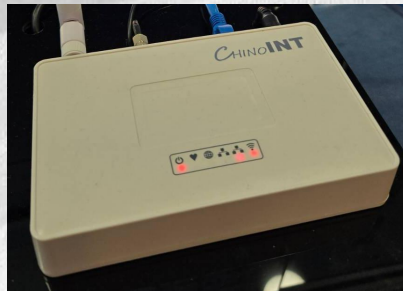
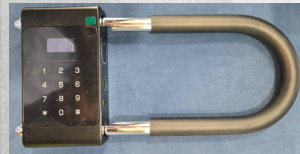
- helmet detection (non-video)
- prolonged stay detection
- real time location
- contractor attendance system



SSSS - ChunWo CMP & Maintenance Project



ChinoINT X CMHK: SSSS with 5G Open Lab @ HKSTP



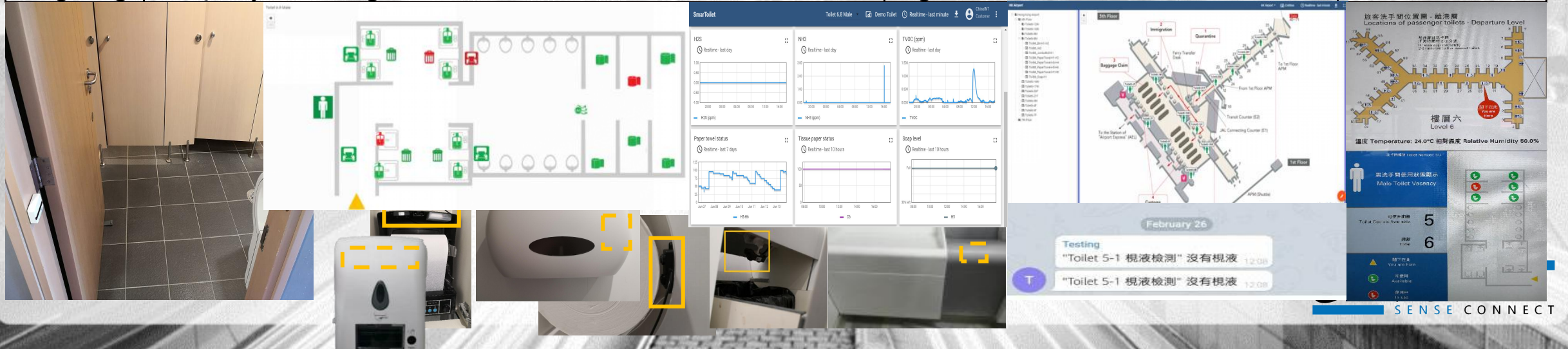
Event Information Status
Welcome to scan the device
Event Serial number: [input]
Event: [input]
Event location: [input]
Event date: [input]
Event time: [input]
Event status: [input]
Event description: [input]
Event contact person: [input]
Event contact number: [input]
Event contact email: [input]
Event contact address: [input]
Event contact phone: [input]
Event contact fax: [input]
Event contact mobile: [input]
Event contact email: [input]
Event contact address: [input]
Event contact phone: [input]
Event contact fax: [input]
Event contact mobile: [input]

Device Information Status
Serial number: [input]
Device Name: [input]
Type: [input]
Manufacturer: [input]
Model number: [input]
Status: [input]
Approval History: [table]
Device Photo: [input]
Device code type: [input]
Approval: [input]
Approval Date: [input]



Reference - Smart Toilet & Air Quality

Region	Name	End user	Year of Completion
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2022
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2022
Hong Kong	Smart Toilet - LoRaWan	Hong Kong International Airport	2022
Hong Kong	Smart Facility Management - LoRaWan @ M+	ASD	2021
Hong Kong	Smart Facility Management - LoRaWan	Kadoorie Estates Limited	2020-2023
Hong Kong	Smart Toilet	Poly U	2022
Hong Kong	Smart Chiller Plant - Yau Ma Tei Public Cargo smart switchboard	EMSD	2022
Hong Kong	Smart Chiller Plant - Po Ning Road Clinic Smart Switchroom	EMSD	2022
Hong Kong	Smart Chiller Plant - Hong Kong Heritage Museum	EMSD	2023
Hong Kong	Smart Chiller Plant - Digitalisation of switchrooms at Lockhart Road MSB	EMSD	2023
Hong Kong	Smart Toilet	Advance Manufacturing Center - HKSTP	2023
Hong Kong	Smart Chiller Plant Monitoring	Poly U	2023
Hong Kong	Air Quality Monitoring	Legislation Council	2025



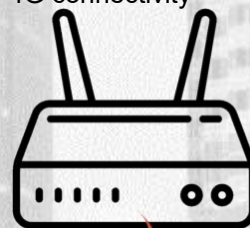
All-in-One IAQ sensor:
°C, Humidity, H2S, NH3, TVOC, PM2.5,
with HCHO, CO2, CO, O2, stc as options

Connection :
RS485/LoRaWan

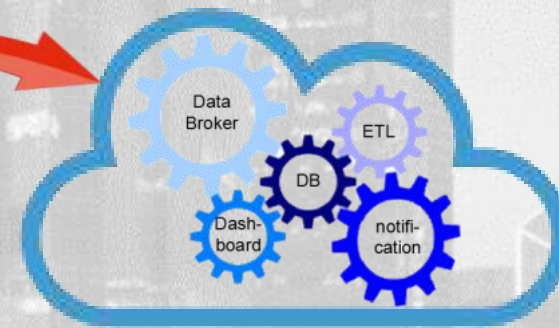


HKIA Smart Toilet over LoRaWan

Edge computing
LoRaWan Gateway
with 4G connectivity



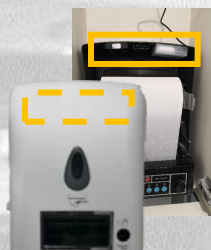
4G



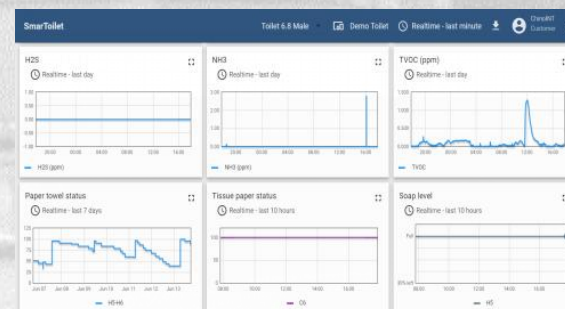
Benefits

- Latest long range low power wireless technology
- Tailor-made, fully integrated design to fit into existing equipment style
- Real time status for consumables, air quality
- On-demand cleaning to save > 60% of resource
- Clear dashboard for management team
- Real time notification for operation team
- Performance data for maintenance team
- Clean and neat on-site dashboard for airport users

Tailor-made, fully integrated, implicit design
LoRaWan sensors
running on battery with long battery life
for consumable status detection



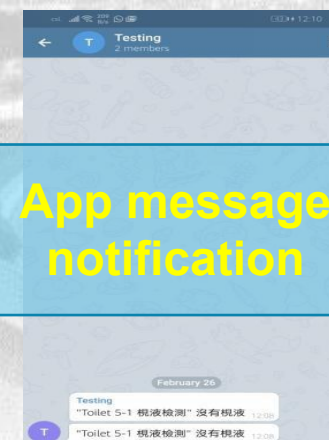
On-site dashboard



Real time alert for rubbish bin,
consumable, air quality, etc



App message notification



CHINOINT
SENSE CONNECT

PolyU Smart Toilet



System Component:

- IOT Edge Computing Gateway
- Odor gas sensors
- People Counting solution
- RFID auto attendance system



Smart Toilet

Shared dashboard
for real time status

Lighting Control

IAQ

Occupancy

Soap level sensor

Edge Computing
AIOT Gateway + 4G

Door sensor

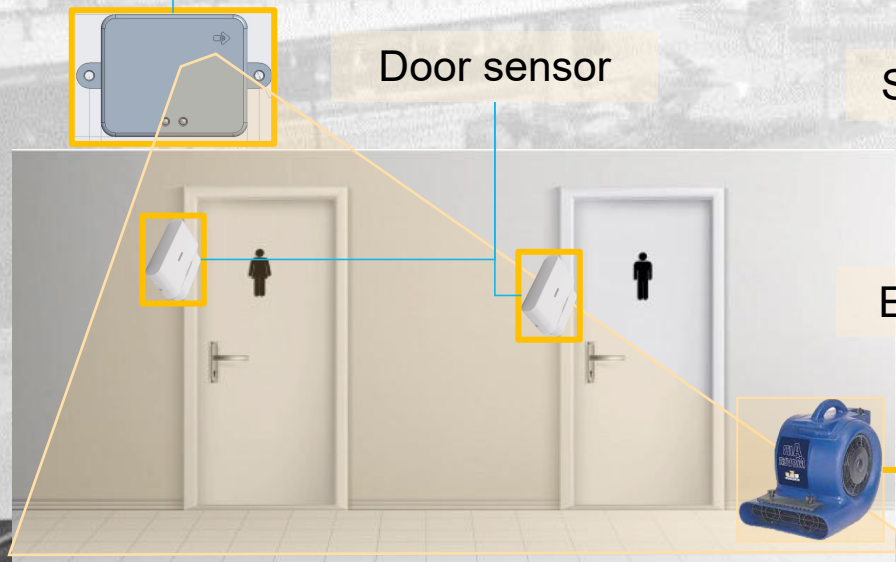
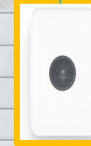
SOS Button

Flood sensor

Equipment Control

Rubbish bin /
Tissue sensor

People counting
statistic for toilet usage analysis



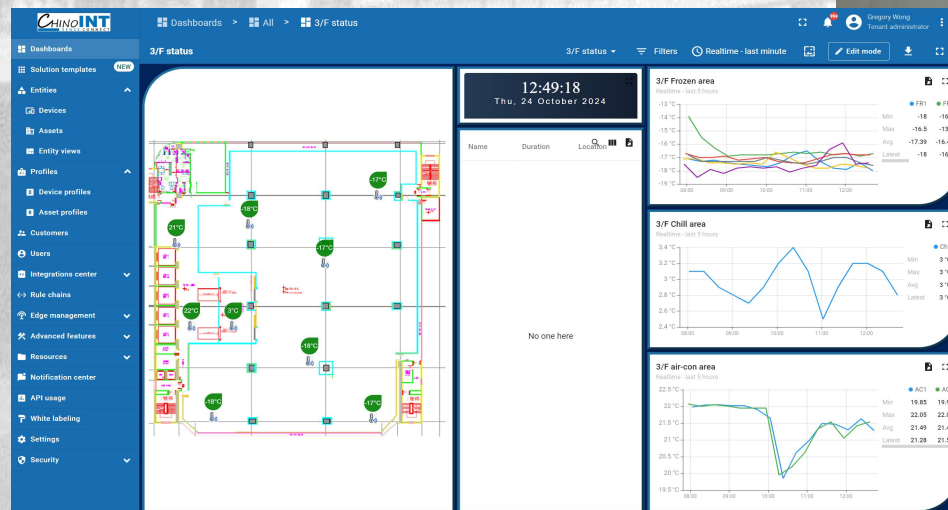
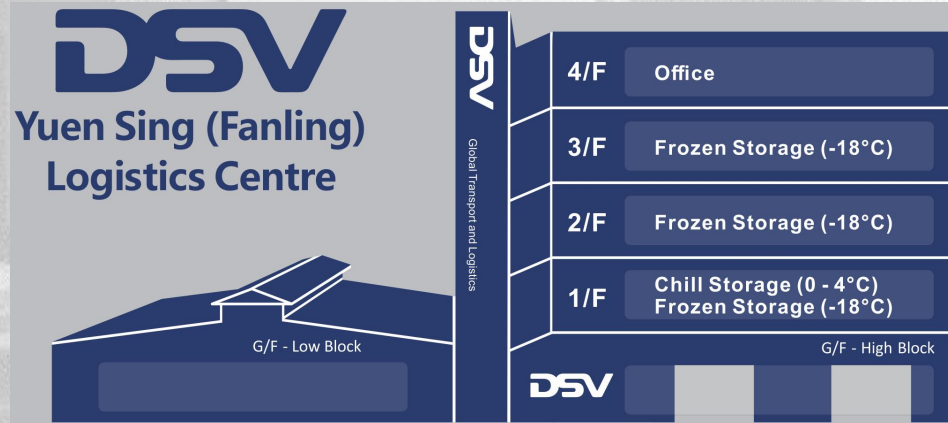
Reference - Real Time Tracking & Counting

Region	Name	End user	Year of Completion
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2020
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2019
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - Confined Space management	CLP - Black Point Power Plant	2022
Hong Kong	SSSS - Confined Space management	CLP - Castle Peak Power Plant	2022
Hong Kong	SSSS - Turbine Work Safety Video Analytic	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - Personnel management for containers during COVID	CLP - Castle Peak Power Plant	2021
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Nga Ying Decoration Ltd	2023
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Por Mee Factory Building	2023
Hong Kong	SSSS - UWB-enabled Collision Avoidance System for Vehicle	SUEZ - IWTS	2021
Hong Kong	Smart Facility Management - LoRaWan	Kadoorie Estates Limited	2020-2023
Macau	Smart Elderly Center - Zigbee	Vila Medalena Macau	2019
Hong Kong	Smart Toilet	Poly U	2022
Hong Kong	Smart Visitor Management - People Counting	Hong Kong U	2020
Hong Kong	Smart Toilet	Advance Manufacturing Center - HKSTP	2022
Hong Kong	Smart Warehouse Monitoring and Staff Tracking	DSV	2024

Warehouse and Walk-in Freezer Monitoring - DSV

For this client, they operate walk-in freezer and warehouse. Staff have to work in a cold and enclosed spaces all the time. To keep their staff safe and with ZERO incidence, they invited ChinoINT to design a RTLS for that is suitable for their entire warehouse building.

The most important features are the real time location tracking, and environment monitoring.



Smart Elderly Center - Macau

Indoor Location

The Indoor Location system locates patients, nurses within the coverage of the Smart Hospital system.

Anti-Wanderer

The Anti-Wanderer system alerts when specific people gets out of the Smart Hospital area. This prevents from missing patients and elderly.

Nurse Call

Whenever in need, the patients, nurses and doctor are able to get immediate help by using the Nurse Call system, together with the Indoor Location system. No false alarm!!

Fall Prevention

Some patients and elderly are not quite mobile. The Fall Prevention system protects them by alerting related personnel to offer assistance when they need to move around.

Remote Home Care

Home pension is getting traction. The Remote Home Care system allows family and nurses to learn the status and needs from the home pensions.



Reference

ChinoINT RFID Family has been deployed successfully. Our RFID devices have been integrated into the Smart Worksite solution invented by ChinoINT at a power plant in Hong Kong, to raise the worksite safety to the next level.

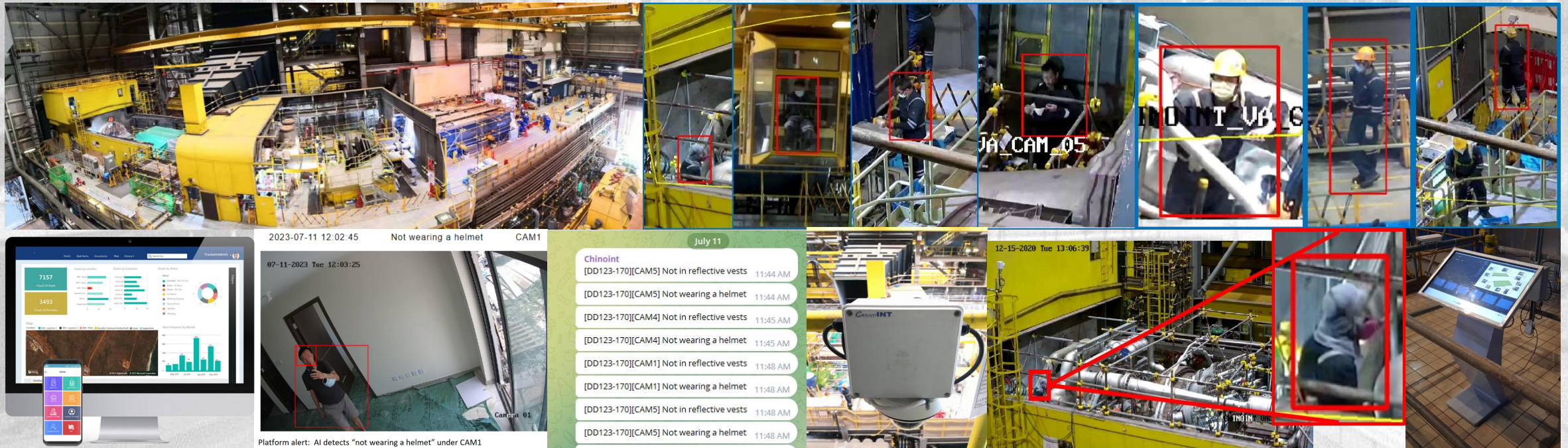


Reference - LoRaWan

Region	Name	End user	Year of Completion
Hong Kong	Smart Metering - LoRaWan	SUEZ - IWTS	2021
Hong Kong	Smart Toilet - LoRaWan	Hong Kong International Airport	2022
Hong Kong	Smart Toilet - LoRaWan	Poly University	2021
Hong Kong	Smart Facility Management - LoRaWan @ M+	ASD	2021
Hong Kong	Smart Facility Management - LoRaWan	Kadoorie Estates Limited	2020-2023
Hong Kong	Smart Metering	Poly U	2020
Hong Kong	Smart Facility Management - Water leakage Detection	Queensway Government Office	2022
Hong Kong	Smart Visitor Management - People Counting	Hong Kong U	2020
Hong Kong	Smart Facility Management Notification Platform	Queensway Government Office	2023
Hong Kong	Smart Chiller Plant Monitoring	EMSD	2022
Hong Kong	Smart Chiller Plant Monitoring	EMSD	2023
Hong Kong	Smart Chiller Plant Monitoring	Poly U	2023

Reference - Video Analytic

Region	Name	End user	Year of Completion
Hong Kong	SSSS - Turbine Work Safety Video Analytic	CLP - Black Point Power Plant	2021
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Nga Ying Decoration Ltd	2023
Hong Kong	SSSS - 5G enabled Smart Construction Site Monitoring	Por Mee Factory Building	2023
Hong Kong	Facial Recognition Terminal with fever detection	Siemens Hong Kong	2020





www.chino-int.com

For more information,
please feel free to contact us:

sales@chino-int.com