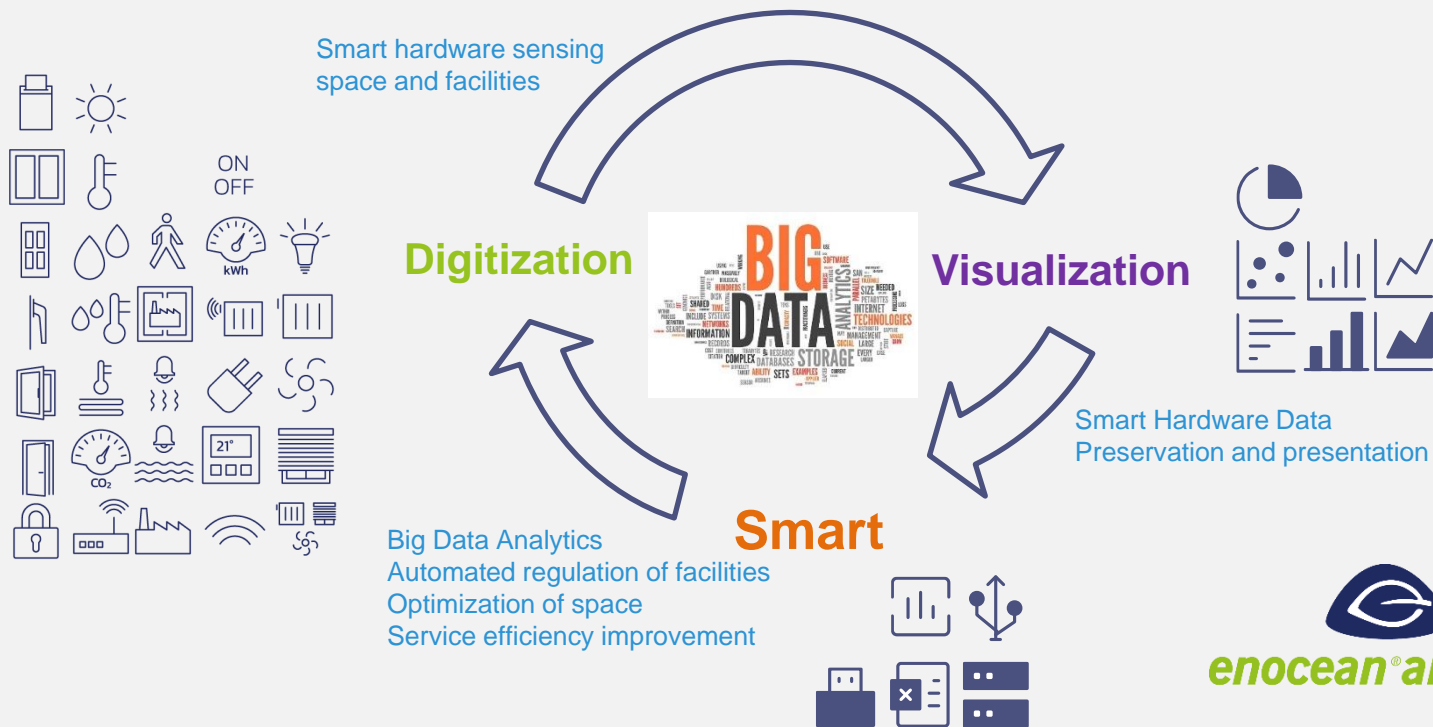


A low-angle, upward-looking photograph of a modern glass skyscraper. The building's facade is composed of a grid of dark metal frames and reflective glass panels, which mirror the sky and other parts of the building. The perspective creates a sense of height and architectural scale. A small yellow square is positioned on the left side of the image, partially overlapping the building and the yellow text box.

# Smart Space & Management

Nanjing WinShine Network Technology Co.,Ltd.

WinShine, Smart space and facility management solution provider based on low-power sensors.





新大正

## Unified Platform



- PC Console
- IoT Device Management APP
- Application applets

## Multiple Businesses



Data Cockpit



Guest Appointment



Space Reservation



Smart Workstation



Smart Meeting Room



Smart Toilet



Space comfort management



Smart Assets



Smart Inspection



Smart Cleaning



Smart Work Order



IoT Device Management



System Management



## Project Management

Create and edit projects

One account supports multiple projects



## Role Management

Multiple Roles

Different roles with different permissions



## People Management

People for different roles



## Space Information Management

Create space according to different business formats

Including a perfect space hierarchy

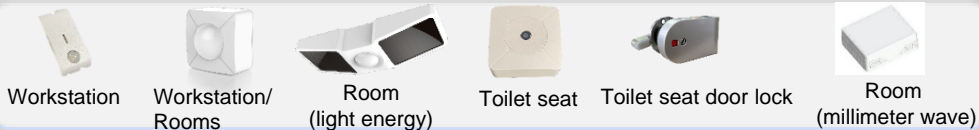
## A Gateway

Connects different types of devices



Aruba AP+EnOcean Dongle

### Occupancy sensors



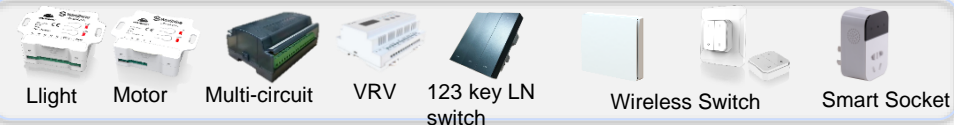
### Environmental Sensors



### Counting Alarm



### Actuator Switch



### Others



### EnOcean – Powered by Energy Harvesting

- The EnOcean Wireless Standard(ISO/IEC 14543-3-1X)is geared to wireless sensors with ultra-low power consumption and energy harvesting to draw energy from their surroundings –e.g. from motion, light or temperature differences.
- This principle enables maintenance-free electronic control systems.
- The EnOcean Wireless Standard in sub1GHz is optimized for use in buildings, as a radio range of 30m indoors is possible.

868

MHz

Europe, China

902

MHz

North America

928

MHz

Japan

### BATTERYLESS – Inevitable for Professional Installations

Batteries are cheap, replacing them is not  
**€25 /sensor typical, if all system batteries are replaced**

10 min/sensor (labour access/replace/test/documentation, service margin)

**€260 if a single battery has to be replaced**

**Typical Office Building:**

**10,000 sensors = 1 man-year**

(10 min/sensor, 223 working days \* 8h)

Batteries cause environmental harm and create safety risk







Workstation occupancy helps companies to grasp the actual occupancy status and accumulated time of workstations, which helps them to make reasonable adjustments and reduce space usage costs.



Workstation status linkage workstation power.



Automatic adjustment of lighting and roller blinds according to illumination sensors.



Automatically adjusts air conditioning according to temperature and humidity.



Automatic adjustment of fresh air according to CO2 concentration.



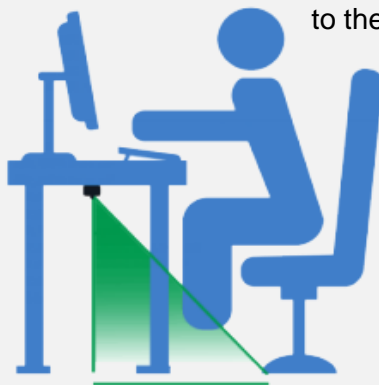
Support Reservation





### Occupancy Sensor

No wiring required, small size (57mm\*57mm\*39.5mm), ultra low power consumption;  
Built-in replaceable battery, service life of about 3 years, low maintenance costs;  
The position can be flexibly adjusted according to the office layout.



## Shared Workstation Reservation

- Users can book available stations by checking floor plans and sharing the remaining stations through mobile app.
- It supports the classification of reservation and usage information by person and team, and provides complete station reservation and usage statistical analysis report by day, week and month, and accurate user behavior analysis report.

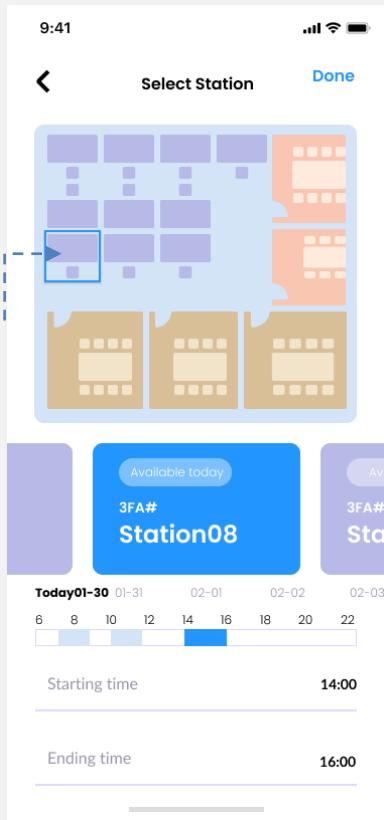
Workstation reservation program

Choose work station

Choose the time

Reserve

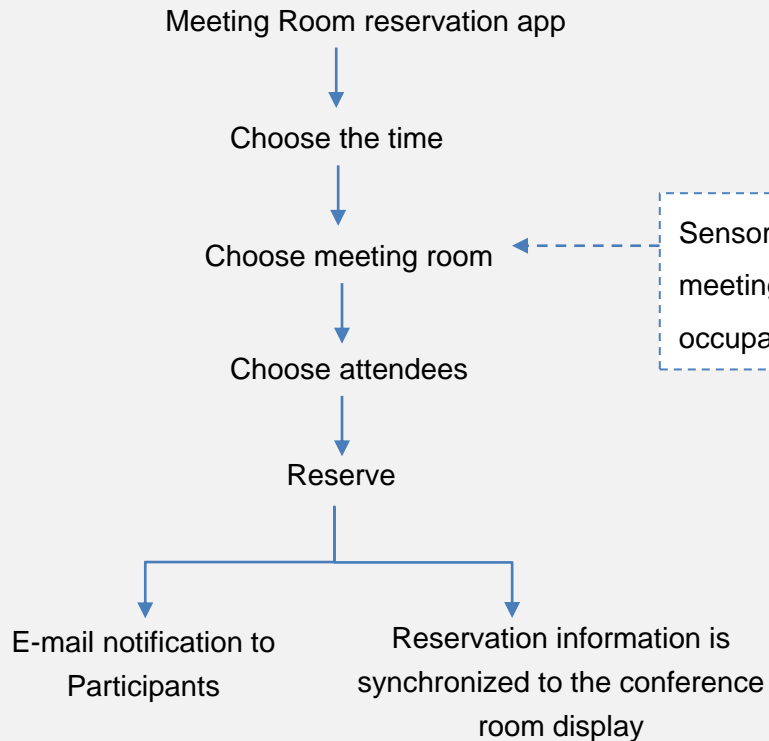
Sensors detect real-time occupancy of workstations and release workstations if no one is present





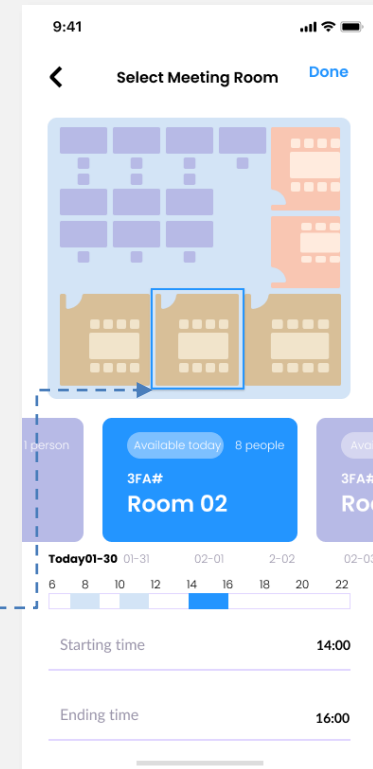


## Meeting Room Reservation



Sensors detect the meeting room occupancy in real time

After the meeting, the sensor detects the free space and releases it in time.



## Meeting Room Reservation Display











Red light is occupied



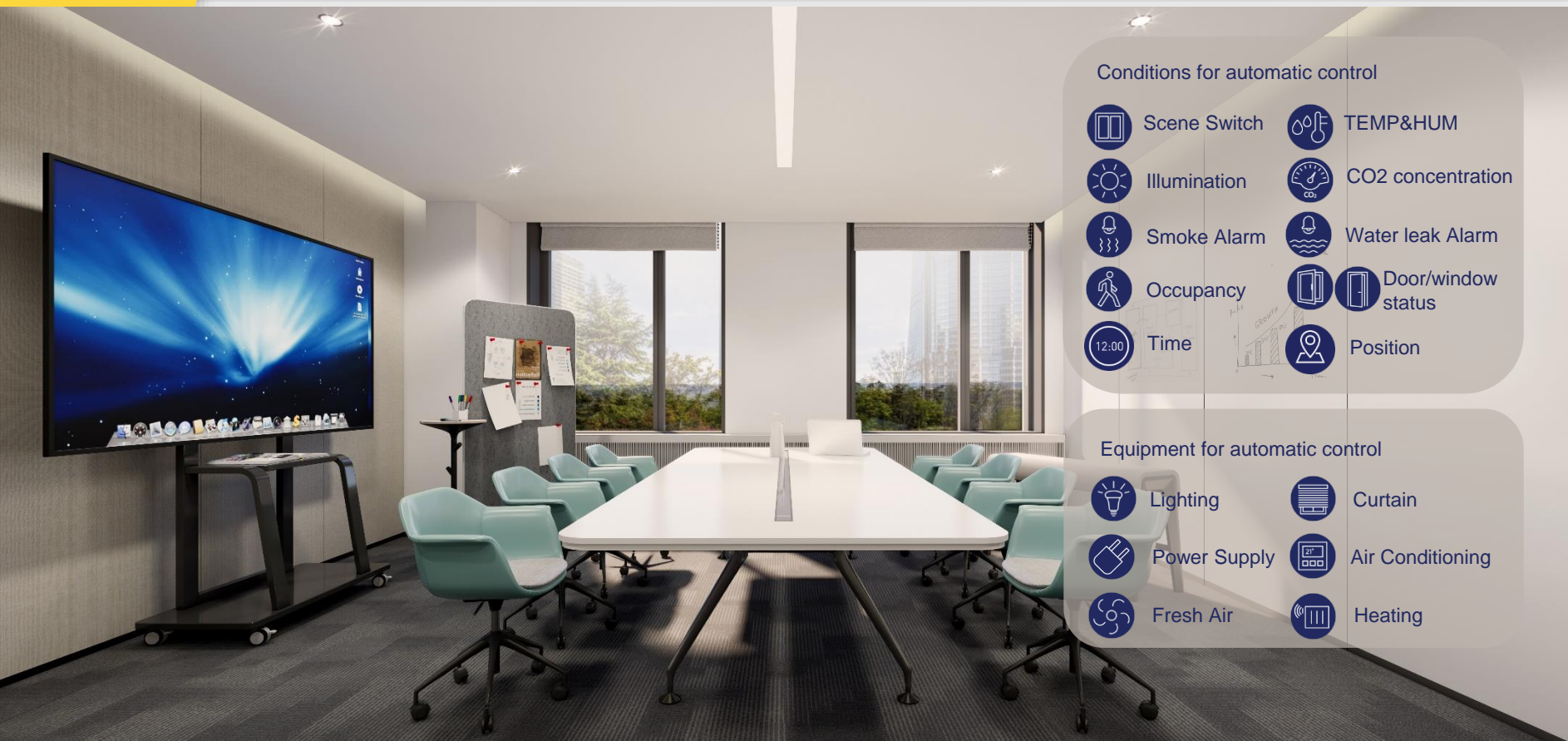
Green light is not occupied

- Red and green indicators on both sides of the screen to visually display the current occupancy status.
- The screen displays current meeting information, environmental information, meeting reservation information, etc.

-  Restroom space monitoring, querying occupancy information, counting the number of uses.
-  On-demand cleaning work orders are pushed according to the number of uses, and the cleaning records are completed by punching a card.
-  Environmental monitoring, linked ventilation and air exchange.
-  Smoking monitoring.
-  Water leak monitoring.
-  Personnel activity linkage lighting.
-  Consumable margin alarms.
-  Water and electricity usage metering.











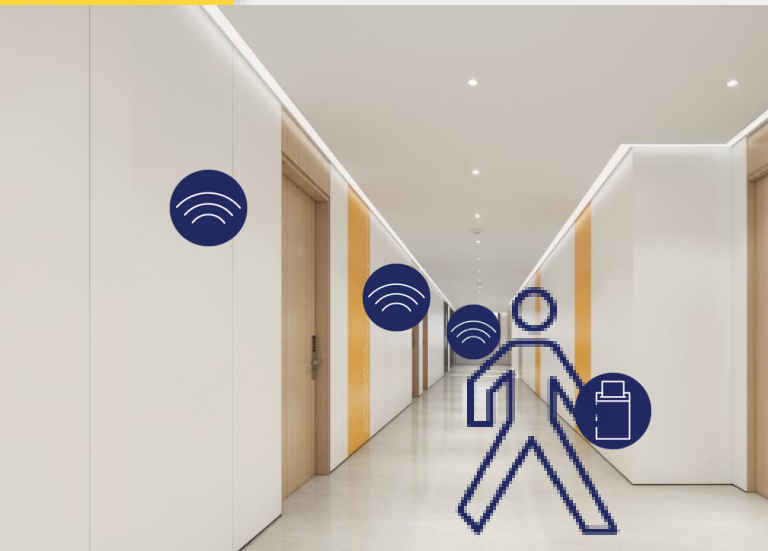


## Conditions for automatic control

- |   |              |   |                    |
|---|--------------|---|--------------------|
|  | Scene Switch |  | TEMP&HUM           |
|  | Illumination |  | CO2 concentration  |
|  | Smoke Alarm  |  | Water leak Alarm   |
|  | Occupancy    |  | Door/window status |
|  | Time         |  | Position           |

## Equipment for automatic control

- |   |              |   |                  |
|---|--------------|---|------------------|
|  | Lighting     |  | Curtain          |
|  | Power Supply |  | Air Conditioning |
|  | Fresh Air    |  | Heating          |



Positioning beacons



Number of personnel activities triggering work orders



Positioning terminals



Sensor triggered work orders

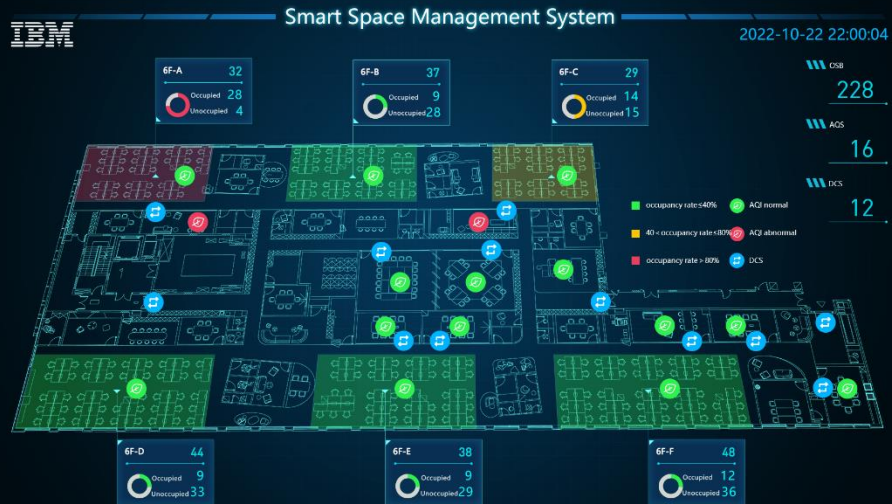
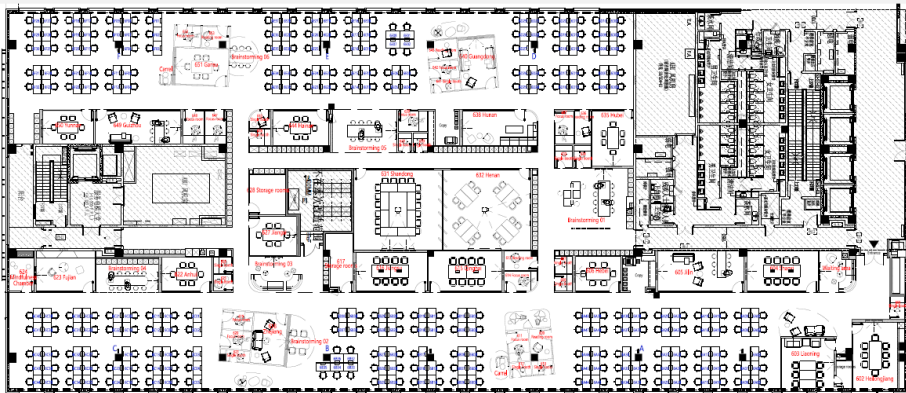


Proactive call triggered work orders

Developing cleaning schedules and recording their completion.

Immediate receipt and completion of trigger cleaning.

Data analysis to evaluate work plans and adjust staffing schedules.



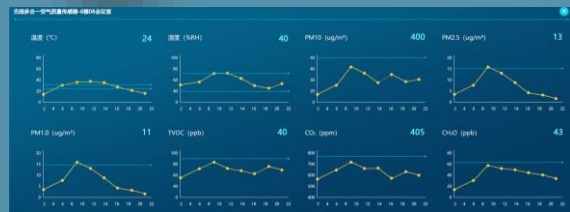
Workstation monitoring



Number of people in meeting room



Space Environment





Temperature and humidity Sensor

Installed in bookshelves to monitor the book storage environment.



Temperature humidity & CO2 concentration Sensor

Installed in the reading area, the data is used to control the air conditioning and fresh air system.



Air Quality Sensor

Installed in public areas to monitor the air quality of the library.



Occupancy sensor

Monitoring of library restroom occupancy.



Actuator

Automatic control of fragrance sprayers and deodorizing machine according to odors.





Self-powered Door  
Lock Sensor

Detect whether the  
toilet is occupied



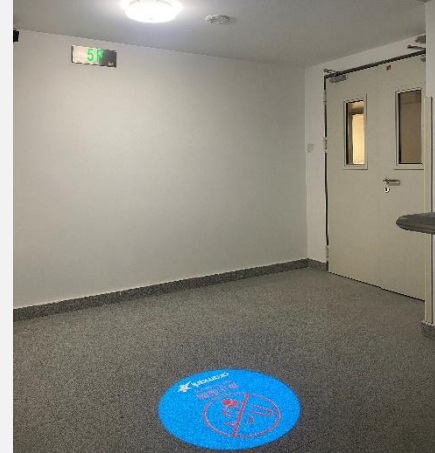
Sensor data sent to the platform via the gateway.  
Guidance screen synchronizes data from the platform.  
Guidance screens serve as a guide and diversion.  
The number of uses accumulated by the sensor can generate on-demand cleaning work orders.



Smart Restroom

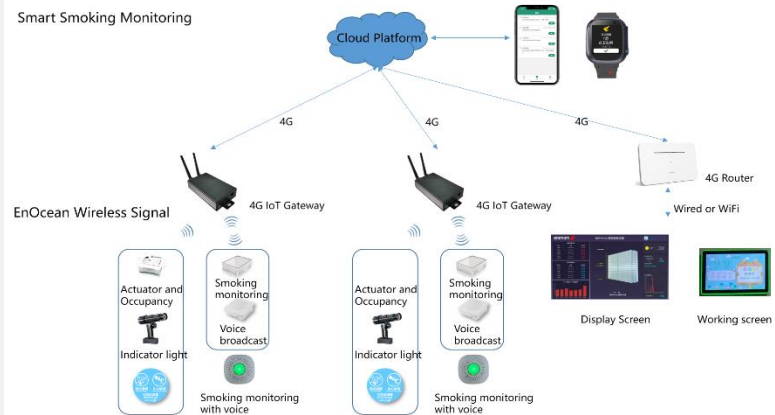
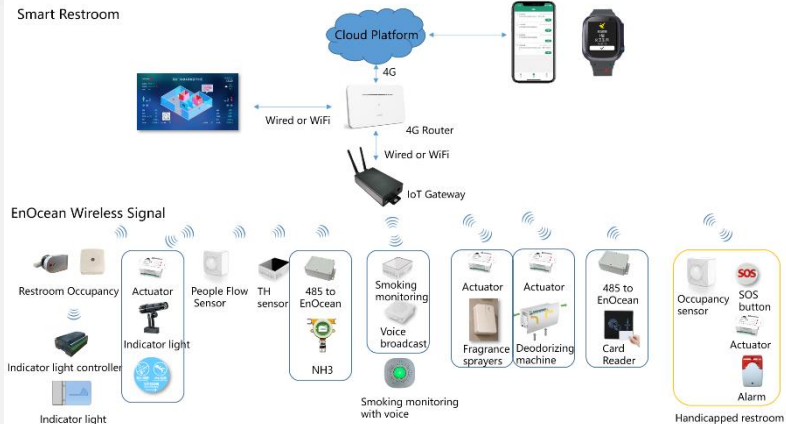


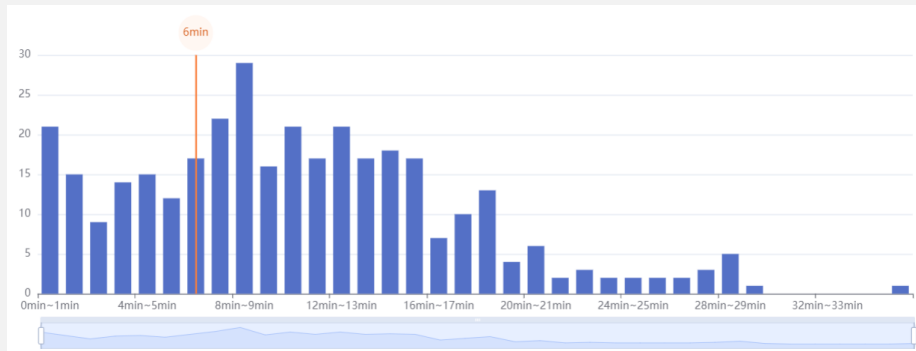
Smart Smoking Monitoring



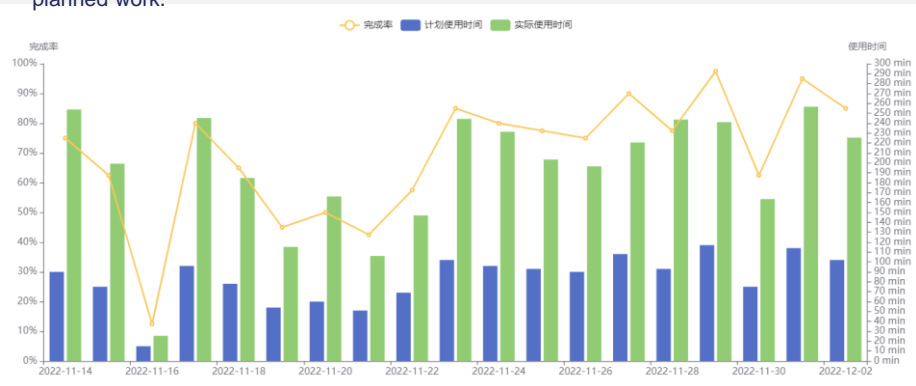
- Usage frequency >>> Cleaning
- Odor >>> Exhaust air, deodorization
- Occupancy >>> Guidance screens, Indicators
- Punch card after cleaning >>> Record cleaning data
- SOS Button >>> Multiple alarm tips

- Detected someone >>> Light Cues
- Detected smoking >>> Voice Alerts  
Push alerts
- Punch card after cleaning >>> Record cleaning data





The people evaluation function calculates the distribution of the time spent to complete the planned work.

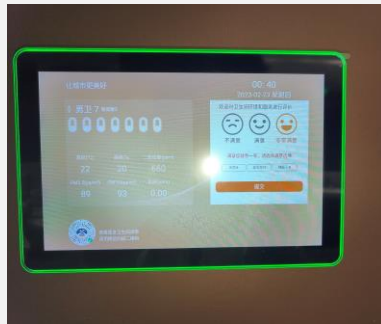
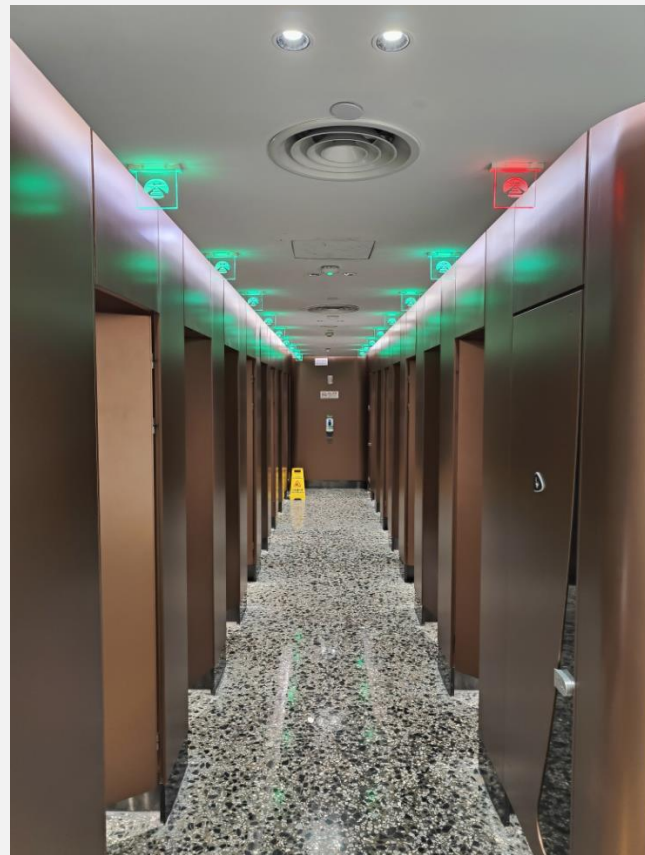
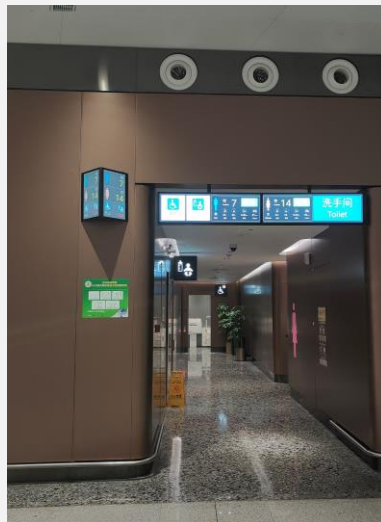
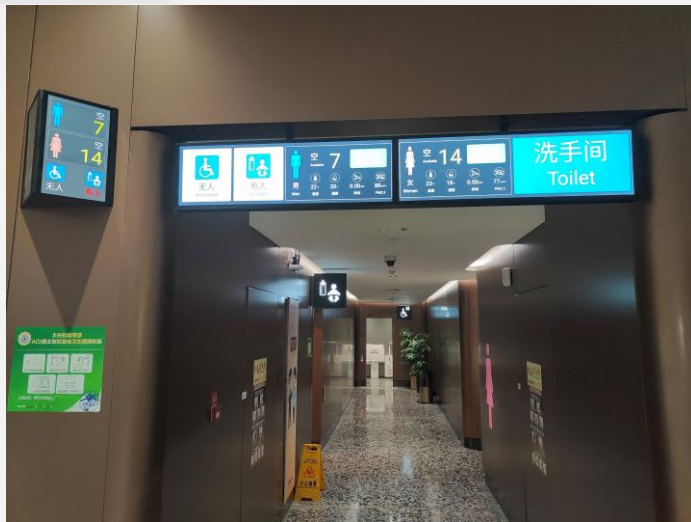


The plan evaluation function calculates the comparison between the actual completion and the plan, which is convenient for managers to adjust the plan according to the actual situation.

- Make a plan.
- Record the completion and time.
- Provide guidance on work plan adjustment and staff training.









Independently deployed software services, different projects can be managed separately, equipped with a dedicated IoT management APP customized with different styles of data screen.



On-demand employee client.



Low-power sensors and actuators can be customized on demand to best fit the scenario and connect to a unified protocol gateway.





A low-angle, upward-looking photograph of a modern glass skyscraper. The building's facade is composed of a grid of dark metal frames and reflective glass panels, which mirror the sky and other parts of the building. The perspective creates a sense of height and architectural scale.

**THANK YOU**

[www.win-shine.com](http://www.win-shine.com)