



Smart Access Control System



Secure Access with Ease



SWG TECHNOLOGIES (M) SDN BHD

SWG Technologies (M) Sdn Bhd is a member of SWG Energy Group, specialising in innovative technological solutions including Smart Access Control System, catering to different client needs.

As an ISO 9001:2015 certified business, we are dedicated to upholding world-class specifications for each product and service we offer to our clients. With the continuous support of our global strategic partners, we have successfully launched innovative products and services to the international market over the years.

In 2018, we launched our Smart Access Control System by providing smart access solution to a Malaysian utility company. Over 3,400 smart padlocks and 100 smart keys were supplied as part of their pilot project for this adoption. Encouraged by the positive feedback, we expanded our offering to various industries with high security demands, ensuring the protection of valuable assets.

ZHUHAI UNITECH POWER TECHNOLOGY CO., LTD.

Founded in 1998, **Zhuhai Unitech Power Technology Co., Ltd.** is committed to providing industrial enterprises with the world's leading operational safety process interlock and intelligent products.

The company has received numerous awards, including the 'National Manufacturing Individual Champion Demonstration Enterprise', 'National Intellectual Property Demonstration Enterprise', 'China Excellent Patent Award', etc., currently with more than 1000 authorised patents in total. A number of achievements and products have been appraised to have reached the international leading level.

60000+

Our products are used in more than 60,000+ projects worldwide in the fields of power, petrochemical, metallurgy, coal, railway and other industries.

30+

Unitech's experience in the industry spans more than 30 years since the invention of microcomputer error-prevention locking system.

5

It has five product series: safety management and control, intelligent monitoring and control, intelligent auxiliary control, intelligent campus, and intelligent lock and control system.

CONTENTS

◎ System Overview	01
◎ System Architecture	02
◎ System Features	03
◎ System Function	04
◎ Bluetooth Smart Padlock	06
◎ Passive Smart Padlock	07
◎ Smart Key	08
◎ Component Checklist	08
◎ Services	08

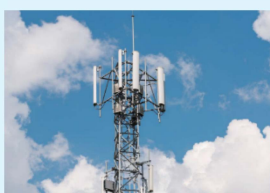
1 System Overview

The smart access control system allows access management by providing secure access to various room doors, cabinet doors and assets. This innovative technology enables businesses to enhance security, streamline operations, and leverage data-driven insights for improved operational efficiency.

The system features high-security anti-theft locks, convenient authority management, real-time lock status monitoring, and automatic recording of operation processes. It effectively addresses issues such as the large number of keys, key duplication, missing unlocking records, and unknown lock statuses.

This system is recommended for asset owners and industries that uphold high standards of security, such as utility and energy, data centres, government facilities, logistics and cargoes, warehouses, high security areas, healthcare providers and more.

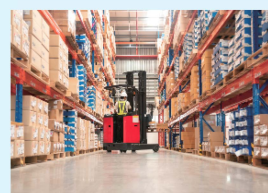
Applicable Scenarios & Industries



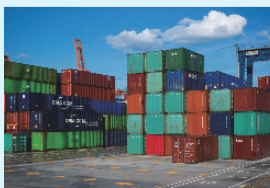
Telco



Power



Warehouses



Logistics



Manufacturing Plants



Data Centres

Key Benefits



Audit Trail

The audit trail provided by the system facilitates the monitoring of who accessed the lock and at what time, thereby enhancing security. Furthermore, it can be utilised to determine responsibility in the event of incidents.

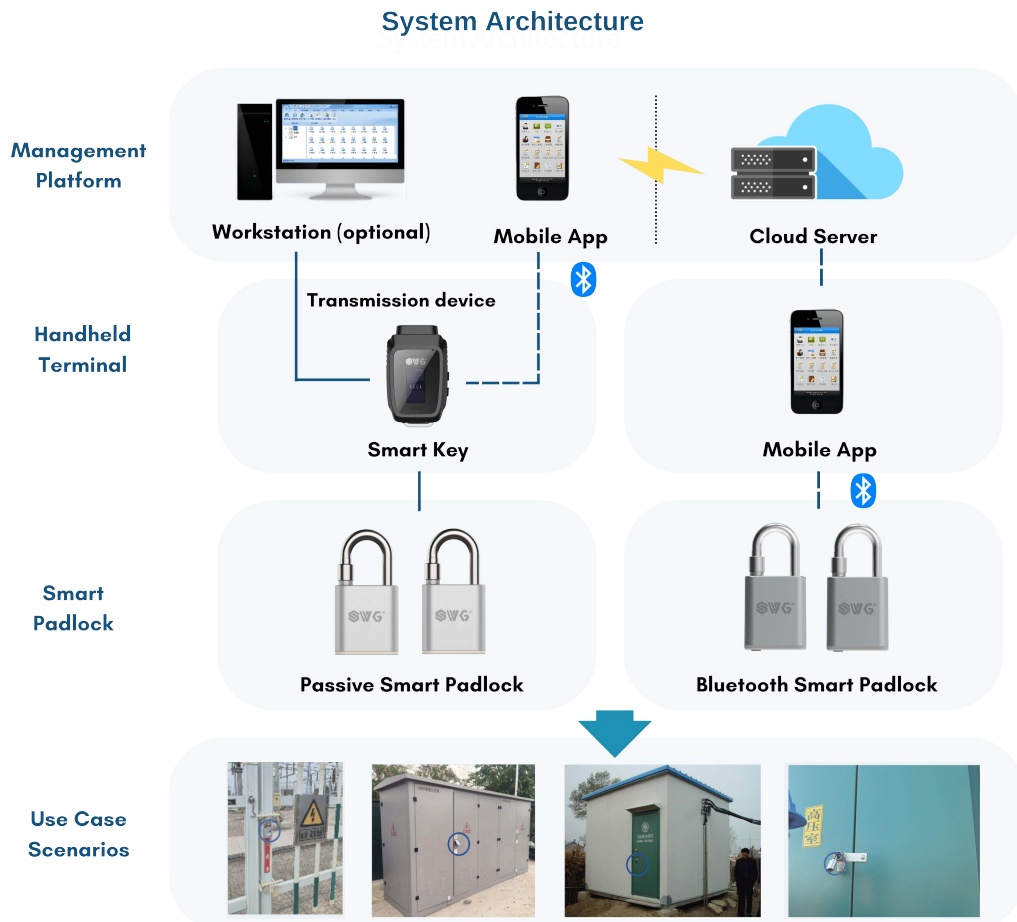


Flexible Access Control and Remote Management

Access permission can be easily customised based on time, date and individual credentials. Additionally, owners have the ability to remotely grant or revoke access permission at any time.

2 System Architecture

The smart access control system is a cloud-based solution which utilises IoT technology to access privilege management, lock status feedback, and operation record traceability. The system primarily comprises a cloud server, workstation (optional), mobile app, key, and smart locks.



3 System Features



Wireless Communication with Two-Way Encryption

The lock has a built-in wireless communication module and the communication process is encrypted in both directions.



Flexible Authorisation Distribution on Demand

On-demand authorisation, supporting flexible authorisation by time, person, number of times, and other different conditions.



Data Visibility Intelligent Analytics

Visual presentation of statistics on unlocking, warning, authorisation, etc.



Status Feedback Security Upgrade

Built-in lock status detection module with timely feedback on the padlock status to mobile application.



Record Storage Full Traceability

Authorisation records and unlocking records are stored in real-time, supporting historical reviews and providing an overview of operational records.



Remote Authorisation Easy to use

APP remote or key authorisation to unlock, do not need to carry a large number of keys, easy to use, efficient.



Ultra-low Power Consumption Easy maintenance

Adopting low power consumption technology or wireless power supply technology, effectively solving the problem of frequently replacing batteries.



Multiple Scenarios Adaptable

The lock has a high level of protection, without keyhole, with its own dust-proof structure, suitable for outdoor complex and harsh environments.

4 System Function

Management Platform

The smart access control system platform offers features such as real-time graphics management, user management, equipment (smart padlock) management, authorisation management, task management, record querying, and more. It is designed to handle diverse application scenarios, support multiple user roles, and accommodate various authority configurations for efficient lock management.

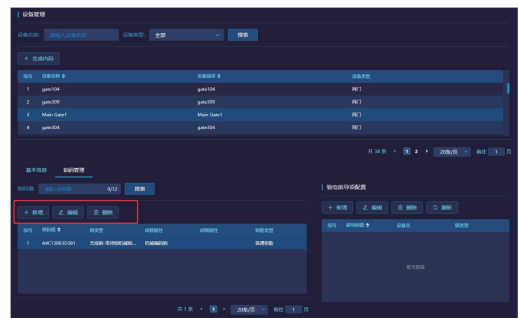
Graphics Management

Graphical display of equipment (smart padlock), padlock description, real-time update of padlock's status based on records uploaded from Mobile APP operation.



Equipment (Smart Lock) Management

The system supports various operational requirements such as adding device(s), information maintenance, and removal of device(s) or outdated information.



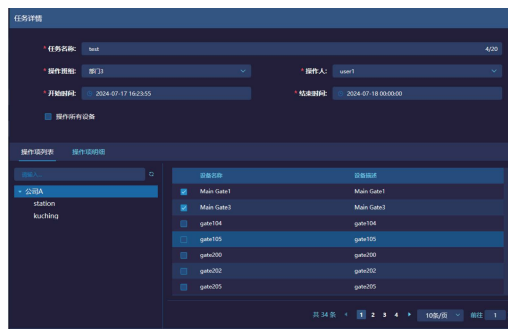
Delegated Authority Management

The configurable personnel authorisation for unlocking devices and validity period supports single or multiple personnel authorisation by department, region, time and other authorisation methods.



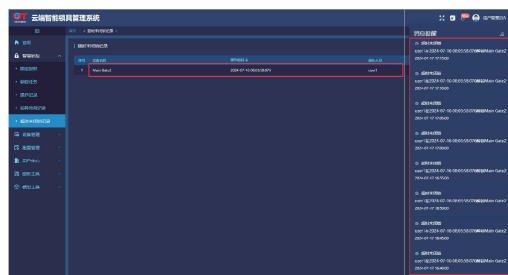
Task Management

The system is used to create lock control tasks and allows users to view task statuses. Task operators can unlock the designated equipment within the specified effective time and area.

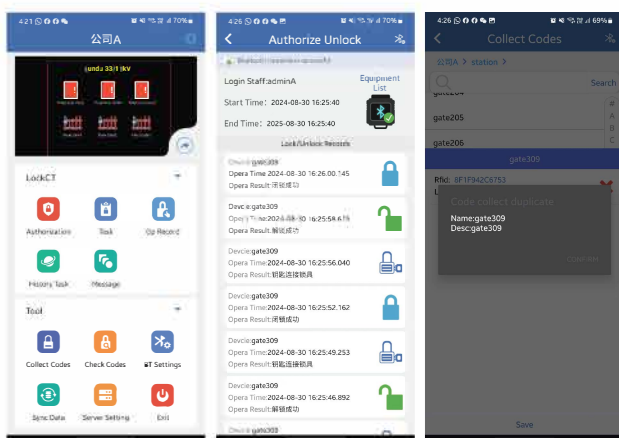


Records search

Support querying operation records, lock anomalies, timeouts without locking, and other related records.



Mobile Application



Authorised Unlocking

Perform unlocking operation on authorised padlocks and upload operation records automatically after operation.

Task Management

Able to create, edit and submit tasks, as well as view the status of tasks.

Record Query

Unlocking records, authorisation records and warning records are automatically uploaded in real-time.

5 Bluetooth Smart Padlock

The Bluetooth smart lock can connect to a mobile phone app via Bluetooth, enabling unlocking through the app. It provides real-time feedback on the lock's status, low battery alerts, emergency unlocking, and access to stored operation records.



Bluetooth Communication

This lock integrates seamlessly with the mobile app, offering not just convenient unlocking but also real-time updates on the lock's condition. Unlocking, real-time status updates, low battery alerts, emergency unlocking, and operation records can be accessed easily.

Condition Monitoring

The lock features a status detection module that monitors its opening and closing status, allowing for real-time status updates.

Low Battery Alert

The lock has a low battery status, and automatic alert prompts when connecting to the app.

Emergency Unlocking

Support emergency unlocking by mechanical key in case of emergency.

Specification

Lock External Size(W×H×T)mm:62×126.5×26		Lock Hook Material: Stainless Steel	
Lock Hook Diameter: 10mm	Lock Body Material: Zinc alloy + Engineering Plastics		
Working Temperature: -25°C~70°C		Battery Life: ≥3 years or ≥3000 unlocking times	
Communication Method: Bluetooth	Protection Class: IP66	Lock Life: ≥100,000 times	
Power Supply: lithium manganese battery, replaceable			

6 Passive Smart Padlock

The lock is designed without a keyhole, providing enhanced security and eliminating the risk of foreign objects obstructing the mechanism. It features a wireless power supply, so there is no need to replace the battery. This lock is ideal for industries that require high anti-theft protection and must withstand complex and unpredictable environmental conditions.



Wireless power supply

Non-contact power supply, no need to replace batteries, high reliability.

Wireless communications

Built-in wireless communication module, two-way encrypted communication process.

Condition Monitoring

Built-in lock status detection module, with open/close lock status detection and output function, to meet the needs of lock status monitoring.

Adaptable

The lock has no keyhole, good anti-theft, high protection level, anti-foreign body blocking, suitable for outdoor complex and harsh environments.

Specification

Lock External Size(W*H*T)mm:58x114.5x23		Lock Hook Material: Stainless Steel
Locking Hook Diameter: 10mm	Lock Body Material: Zinc Alloy	
Working Temperature: -25°C~70°C		Power Supply: wireless power supply
Protection Class: IP67	Communication Mode: Wireless	Lock Life: ≥100,000 times

7 Smart Key

The passive smart lock uses a special key that allows for opening and closing within an authorised range. It features wireless power supply, wireless communication, identity recognition, status monitoring, automatic saving of operation records, and the ability to transmit these records back.



- Installation of code-reading module on the collection side, which can read and recognise the lock identification code
- Send unlocking commands to authorised locks and deny access to those outside the authorised range
- Built-in memory chip, can automatically save and send back unlocking records
- 800mAh battery, continuous unlocking times \geq 500 times
- Mechanical life \geq 100000 times
- Electrostatic discharge immunity: Level 4
- Industrial frequency magnetic field immunity: Level 4

8 Component Checklist

Bluetooth Smart Padlock Set	<ul style="list-style-type: none"> ✓ System software ✓ Cloud Services 	<ul style="list-style-type: none"> ✓ Mobile APP ✓ Bluetooth Smart Padlock
Passive Smart Padlock Set	<ul style="list-style-type: none"> ✓ System software ✓ Cloud Services 	<ul style="list-style-type: none"> ✓ Mobile APP ✓ Key ✓ Passive Smart Padlock

9 Services

Our services extend beyond delivering products - we ensure your success at every stage. Our dedicated sales team tailors solutions to your needs, while our expert technical personnel provide thorough onboarding training for a seamless transition. We offer robust after-sales support, including warranties, technical assistance, and an easy returns process. Our team is here to ensure smooth operations and protect your investment.

Exclusive Collaboration



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Website QR Code

The information provided in the samples is intended solely as a reference. For relevant information, please contact us to confirm.

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