MakeID

Electronic Key-Operated Padlock Brochure

SMARTLOCK

Chongqing Pinsheng Technology Co., Ltd.

Product Overview

This passive padlock, together with its intelligent digital key, integrates low-power IoT technology and advanced digital encryption. It supports remote authorization, offline operation, one-click unlocking, operation traceability, and records upload. A single key can unlock multiple locks, effectively addressing the limitations of traditional mechanical locks—such as difficult key management, ambiguous authorization, and lack of traceability—thereby ensuring the safe and reliable operation of facilities.

Application Scenario

Widely used in Optical Distribution Boxes (ODB), Power Distribution Cabinets(PDC), Switchgear, and other critical infrastructure environments.

Optical Distribution Box(ODB)

Power Distribution Cabinet(PDC)

Key Features

Digital Key Unlock

Contact-based locking/unlocking; one key supports multiple lock types.

Battery-free, Maintenance-Free Design

No wiring or battery replacement needed, minimizing maintenance costs.

Durability& Reliability

304 stainless steel housing with IP67 protection for reliable performance in harsh environments.

Offline Authorization

Access credentials are securely stored in the key, allowing operation without network connectivity.

Comprehensive Traceability

All lock and unlock events are recorded on app&pc software for real-time tracking.

Secure Authorization

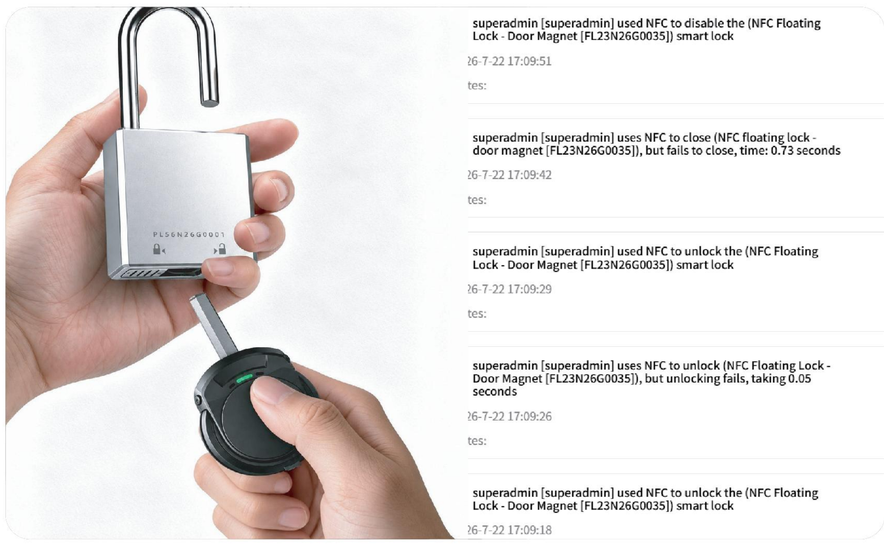
Digital encryption prevents unauthorized access and duplication, role-based permissions reduce the risk of misoperation.

Application Value

The lock management platform works in conjunction with smart locks to enable full-process traceability and prevent unauthorized duplication through digital encryption and remote authorization. Even in the event of network outages or system failures, locks can still be accessed quickly, reducing manual intervention, ensuring operational continuity, and enhancing the standardization and security.

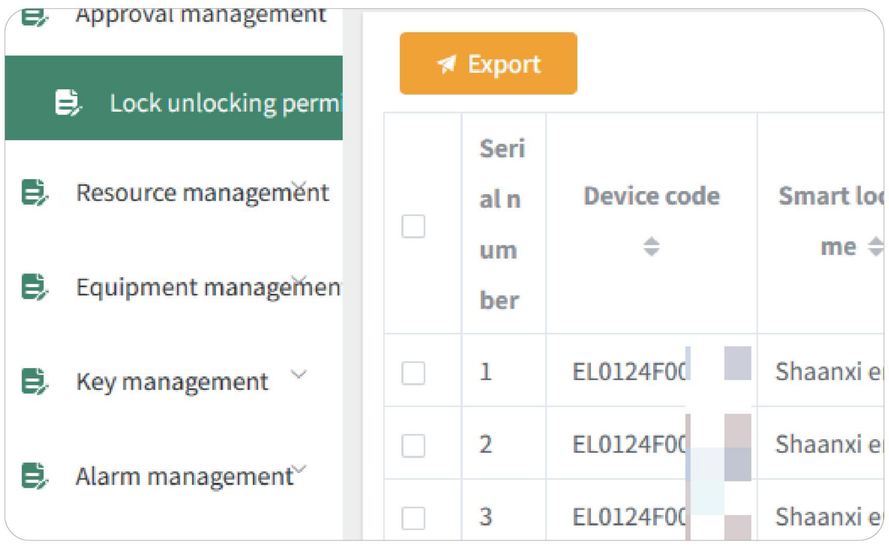
GIS-Based Visualization

Real-time visualization of lock status via GIS mapping, with one-click navigation and clear display.



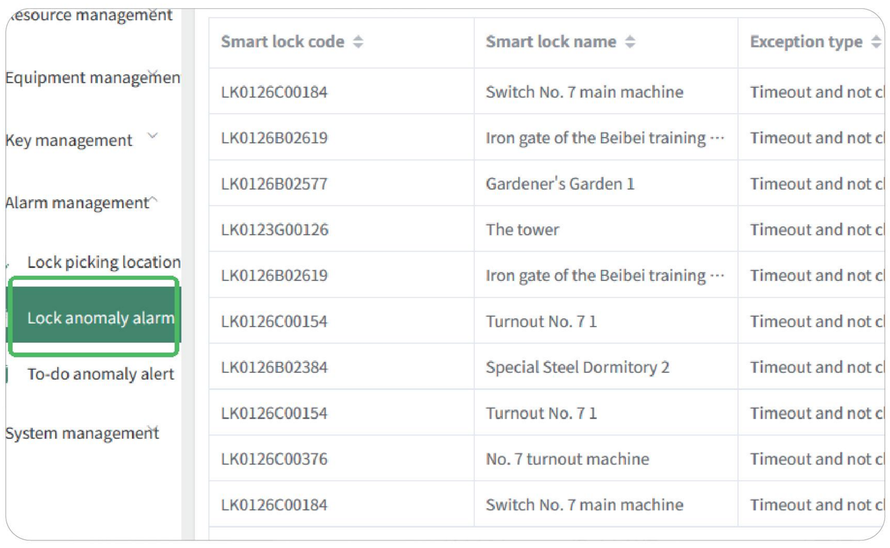
Operation Log Traceability

Automatic recording of all lock/unlock activities, ensuring transparency and full traceability.



Access Control Management

Flexible user permissions, including unlocking, locking, monitoring and management.



Real-Time Alerts

Issue alerts for abnormal conditions such as inactivity or location anomalies, send notifications via mobile app, platform interface, or SMS.

Product Specifications

Parameter	Specification	Picture
NFC Smart Padlock		
Model#	GSV60-E10	
Type	Padlock	
Dimensions	120 × 56 × 28 mm, Shackle Diameter φ8 mm	
Housing Material	304 Stainless Steel	
Communication Method	Contact-based communication via digital key	
Power Supply	Contact-based power supplied by digital key	
Unlocking Method	Rotate the key; turn the cylinder clockwise to the preset position	
Unlocking Time	⩽ 2 s	
Locking Method	Close the shackle; rotate the key counterclockwise to lock	
Data Security	AES-128 encryption	
Protection Rating	IP67	
Operating Conditions	-20°C ~ +70°C, 10–95% RH (condensing)	
Storage Conditions	-40°C ~ +80°C, 10–95% RH (condensing)	
Flammability Rating	Non-metallic parts comply with V-0 rating	
NFC Smart Key		
Model#	ZKV30-E10	
Dimensions	86 × 53 × 21 mm	
Housing Material	Zinc Alloy + PC	
Communication Method	Bluetooth, USB interface	
Unlocking Method	Twist to unlock	
Unlocking Time	⩽ 1 s (contact-based)	
Protection Rating	IP65	
Power Supply	450 mAh rechargeable lithium battery	
Charging Interface	USB Type-C	
Charging Time	< 3 hours	
Battery Life	⩾ 1000 NFC unlocking operations per full charge	
Operating Conditions	-40°C to +80°C, 20–95% RH (with condensing)	
Storage Capacity	⩾ 100 user permission records; ⩾ 1000 operation logs Authorization Methods: Offline(via phone APP or USB cable) real-time authorization(via Bluetooth)	
Flammability Rating	Non-metallic parts comply with V-0 (GB/T 2408-2021)	

Unlock the Full Value of Every Asset

Chongqing Pinsheng Technology Co., Ltd.

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