

SMART LOTO SAFETY LOCK





Digitalize Safety



Visualize Processes



Standardize Management



Company Profile

Ningbo Vichnet Technology Co., Ltd was established in 2006. Vichnet is a high-tech enterprise committed to the development, manufacturing, and sales of intelligent safety protection systems. We provide partitioning solutions, machine guarding solutions, access management solutions, cable management solutions, and impact protection solutions for our customers and have obtained ISO9001, ISO14001, ISO45001, CE, UL, CUL, E90 certifications. We have also played key roles in developing several national and industry standards in logistics, warehousing, machinery and telecommunication engineering.

As a high-tech enterprise, we are rooted in technological innovation and cross-industry collaboration. Working with local universities and industry experts, our R&D department has worked to apply new information technologies such as artificial intelligence and the Internet of Things to the field of industrial safety.



Lockout/Tagout (LOTO)

Lockout/tagout (LOTO) refers to safety practices and procedures that ensure dangerous machines are properly shut off and will not be able to unexpectedly release hazardous energy during service or maintenance activities.



Traditional Lockout/Tagout (LOTO) practices rely on process management to reduce the risks caused by hazardous equipment. This usually entails hanging a lock on the supply power or the interlock device of the safety door and attaching a warning tag on the physical restraint device.

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Challenges of Traditional Lockout/Tagout Systems

Unable to ensure perfect worker compliance to Lockout/Tagout procedures.

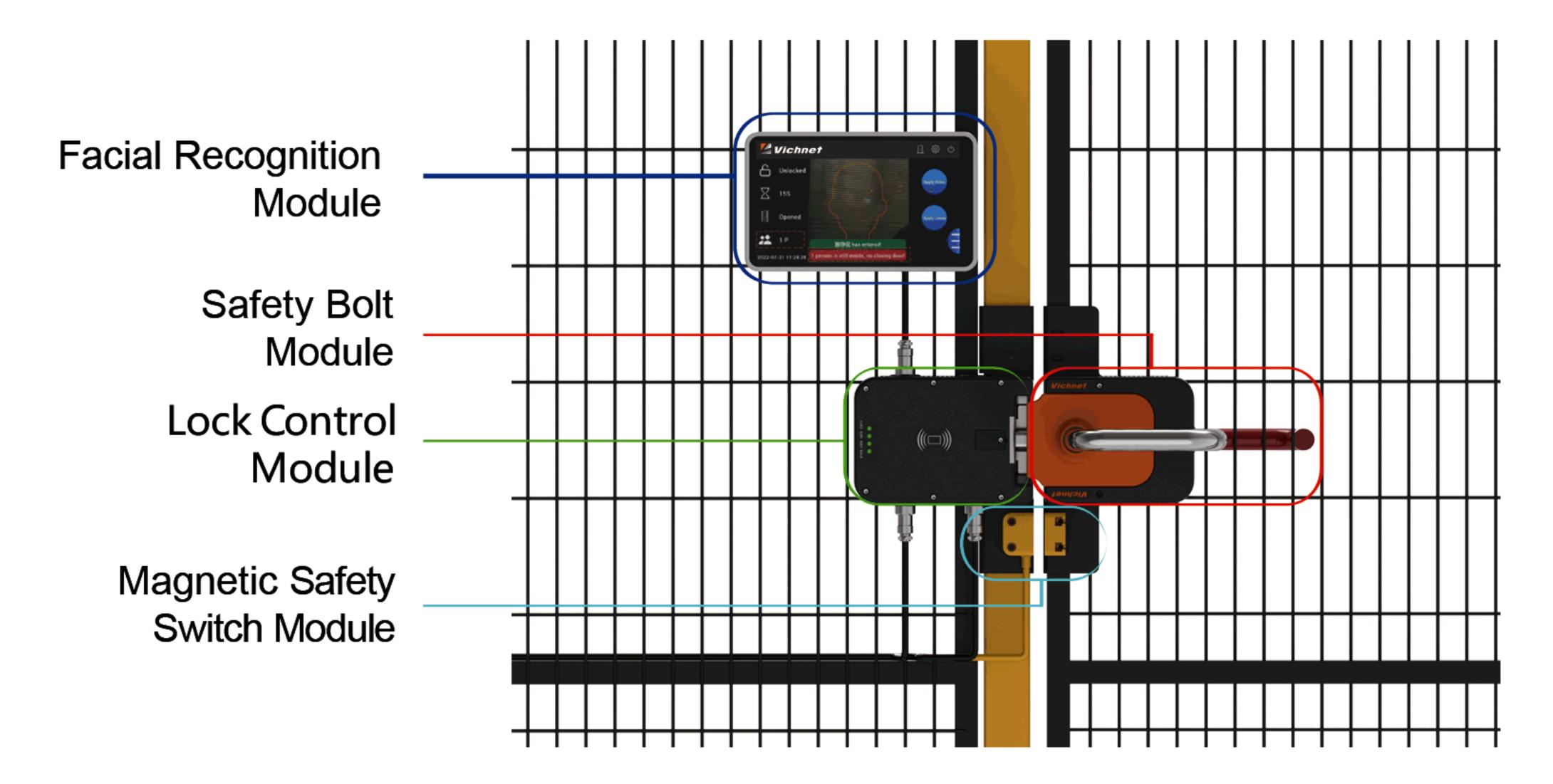
No record of workers entering and exiting.



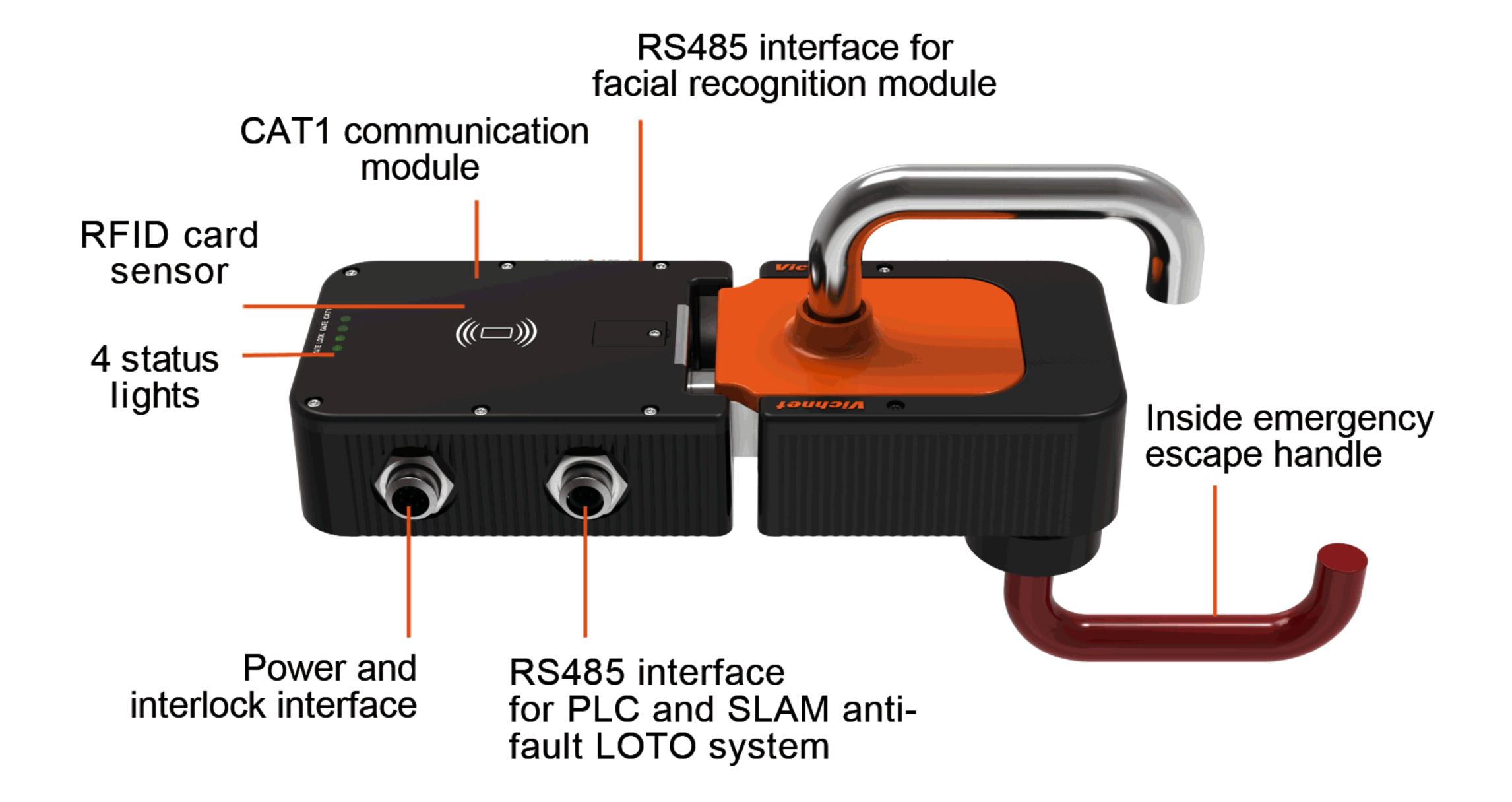
Limited number of personnel who can be protected at the same time. Unable to remotely know whether machinery is being serviced or whether there are personnel in restricted areas.

Smart LOTO Safety Lock Solutions

Modules



Core Functions



Authorized Entry

By allowing entry only when authorized RFID cards are swiped, our system ensures only authorized personnel can enter restricted areas. RFID authorization can be managed through cloud platforms.

Smart LOTO

Our locks are loaded with LOTO programming. Capable of determining whether personnel remain in restricted areas, our smart LOTO lock can sound alarms, prevent gates from being locked and prevent systems from being powered up. This can effectively avoid accidents caused by human mistakes in traditional LOTO processes.

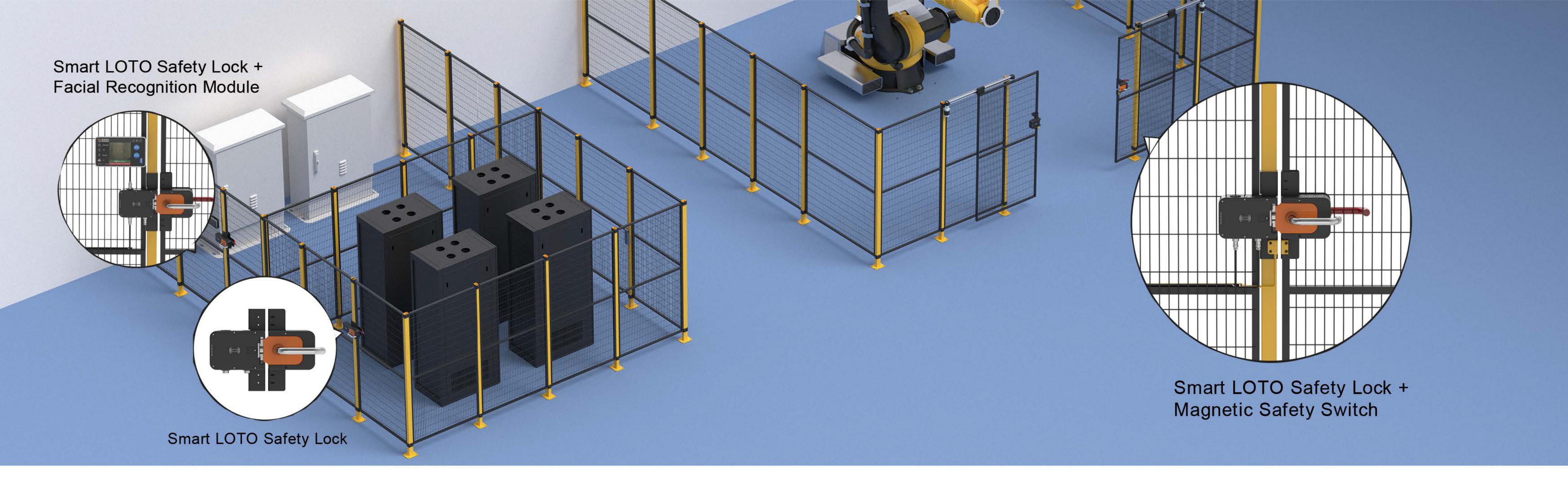
IoT Interaction

Records of personnel entry and exit can be uploaded to cloud servers through CAT1 wireless communication. Lock statuses can be monitored online in real-time. Lock software can also be upgraded remotely.

Emergency Escape Handle

Allows personnel to escape from the inside when facing emergency situations.

Function	Basic	Advanced	Premium
RFID card sensor	~	~	~
Smart LOTO	✓	✓	
RS485 communication	✓	~	✓
Supported card keys	3 Cards	3 Cards	3 Cards + unlimited facial recognition
Emergency escape handle	Optional	✓	✓
Real-time online monitoring	\times	✓	
Authorization management	×	✓	✓
Time log	×	✓	
Facial recognition module	Optional	Optional	✓
Magnetic safety switch module	Optional	Optional	✓



Facial Recognition



- Equipped with the smart LOTO safety lock, facial recognition can be applied to achieve the funtion of authorized entry.
- New staff facial IDs can be created locally amd batch creation of facial IDs through photo uploading is also supported.
- The screen can display the number and identity of the personnel inside.

Optional Magnetic Safety Switch Module



- Magnetic non-contact safety switch
- Monitors if the safety door is closed

Performance level d By connecting additional modules, performance level can reach e

Product Parameters

Parameter	Value	
Holding force	900N	
Rated voltage	24VDC	
Voltage range	21VDC~27VDC	
No load current	30mA	
Full load current	300mA	
Output type of signal interface	Semiconductor output, source	
Input / output type of signal interface	24VDC	
Ambient temperature	5%~80%	
Humidity	-30℃~55℃	
Ingress Protection Rating	IP54	

Included Accessories



- 1. Lock Control Module + Mounting Sheet Metal
- 2. Handle Module + Mounting Sheet Metal
- 3. Escape Handle Componets (Mounting Sheet Metal + Red Escape Handle + Circlips for Shaft)
- Screw Accessories
- 5. NFC Card (Primary Card*1, Sub-card *2)
- 6. Aviation 8 Pins Plug and 3m Socket Wire Cable Connector
- 7. Aviation 2 Pins Plug and 3m Socket Wire Cable Connector
- 8. Instruction Manual

^{*} If the product is used on single sliding doors, an extra mounting sheet metal is needed. For further inquiries regarding product installation, please contact our service team.

^{*} The basic smart LOTO safety lock does not include emergency escape module accessories.



Scan the QR code to access more information on our official website

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