

Warehouse tool management

RFID IOT APPLICATION

Product Catalogue

Application process



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Intelligent equipment management system, the use of UHF RFID technology, each tool and instrument for unique identification, record the use and return of equipment, time, place, responsible person and type and quantity.

The real-time management of equipment through RFID can prevent the loss of equipment, and if there is a loss, it can also be found through RFID handheld devices, so as to truly realize the intelligent management of equipment.

Tool cabinet/cart access management process

1 Keyless opening

Operators use credit card, fingerprint, face recognition or password login to verify the authority

2 Convenient access

The corresponding cabinet door or drawer can be opened to pick up the necessary equipment

3 Automatic recording

When the access operation is completed and the cabinet door is closed, the type and quantity of the return tool are automatically recorded through RFID technology, and the recipient is automatically associated

4 Real-time update data

After the operation is complete, the system immediately updates the service data feedback to the background for easy query and management

Wall-hung RFID Reader

RFID Cabinet Cart

Tool RFID Cabinet(Outdoor)

RFID Cabinet

Tool RFID Cabinet

Handhelp RFID Reader

RFID Shelf

1 Suction Top RFID Integrated Reader

2 RFID Intelligent Access Control

3 RFID Kiosk

4 RFID Work table

5 RFID Box

6 Desktop RFID Reader (max)

7 Desktop RFID Reader (mini)

Tool warehouse self-return process

1 Door opening recognition

Through the face recognition device, authenticate the authority and open the door to enter the warehouse.

2 Tool selection

According to the operation requirements, the tools are selected on the shelf.

3 RFID identification

Through the RFID intelligent workstation at the door of the warehouse or the RFID wall-mounted identification all-in-one machine, the tool recognition and face recognition are associated with the recipient. Support multiple people to enter the warehouse and help them to return.

4 Tool review

Through the RFID ceiling-mounted all-in-one machine or RFID intelligent access control at the warehouse door for access review.

5 End of receipt

When going out, if there are tools that are not used, the RFID access control operator will receive them in time according to the specifications

6 Tool return

When returning, the workstation or wall-mounted machine can quickly identify the return and put it back on the shelf

7 RFID automatic inventory

RFID shelves can realize the inventory of the whole library, timely calibration and update the current inventory.

System Demo

ps: The specific language used depends on the application software locale and environment



1 Client software

Tool cabinet management system

The operator can realize the tool through the intelligent cabinet management take back operation, the cabinet can record the use and use of tools in real time return status and inspection reminder, etc .



Intelligent cabinet management system

Authority Management	Tool information maintenance	Personnel management	Check tool reminder	Unreturned management
Assignment of personnel rights, administrator rights, staff rights	Modify and bind tool information, including data import, input RFID tags, etc	Modify Basic personnel information Import personnel information with offline permission	Summary all validation tools include expired warnings and upcoming expiration alerts	Set the overdue time: overdue freeze the use of permission to query unreturned records
Exception management	Access record query	Inventory report query	Monitoring query	Tool cabinet status management
Query all abnormal records, including unrecorded labels, tool storage errors, and SMS alerts	Query return records in real time according to filtering conditions	Query inventory records in real time according to filtering conditions	Query the monitoring information of the corresponding time range based on the time	Real-time status summary of the tool cabinet, including the cabinet door time out, offline, etc



2 B/S architecture

Tool ledger management system

Operators and managers are available on the equipped computers query and manage the tool through the ledger management system.



3 Linux / MySQL

System server

The system server aggregates all tools related to the storage site message.

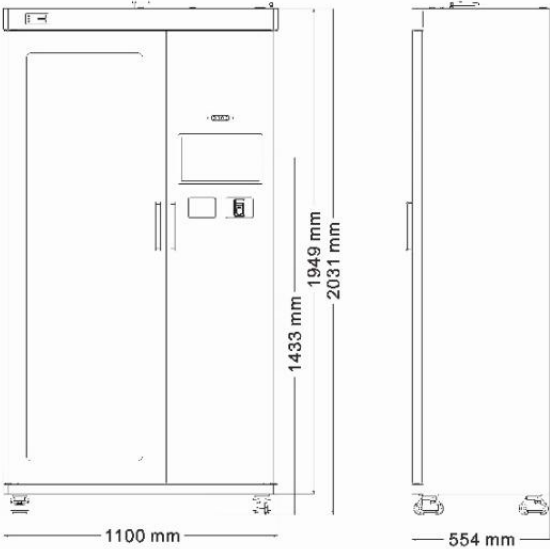
Scheme characteristics

- 1 Unmanned management**
Self-service supermarket management, can realize the tool self-service return operation.
- 2 Intelligent recognition**
RFID technology is used to assign a unique ID to each tool for management.
- 3 Rapid batch**
RFID can quickly identify more than 30 tools in 1 second.
- 4 Clear responsibility**
Through face recognition, fingerprint and other technologies to bind the recipient, easy to trace.
- 5 Real-time inventable**
Through RFID, the whole cabinet/whole library can be realized with a keyboard point, real-time inventory summary.
- 6 Overdue call the police**
Receive tools overdue, real-time remind the administrator to timely trace processing.
- 7 Check can be reminded**
For tools that need to be calibrated and inspected on a regular basis, do so by date reminder.
- 8 Statistically searchable**
Return records, inventory details can be filtered according to conditions, query real: time records



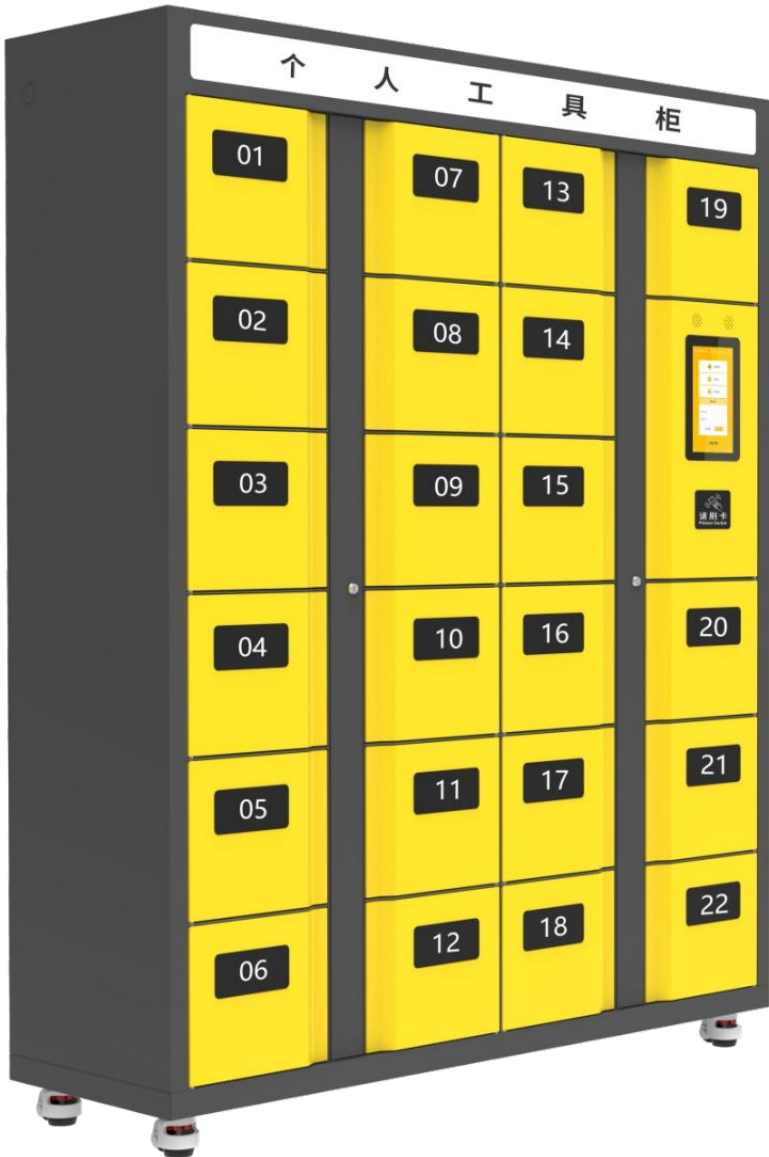
CK-GT1

Size



Peculiarity

- 1 RFID technology, unattended, 24 hours operation, RFID technology to work with ID identification, to achieve electronic management.
- 2 Man-machine communication operation is simple, support face recognition, brush card permissions, interactive sense of strong, simple operation.
- 3 Automatic management of tool life cycle and inspection cycle.
- 4 Tools out, storage automatic identification record, to the time auto matic reminder of non-return.



CK-G2224

Size



Peculiarity

- 1 Automatic matching, automatic recording, real-time upload.
- 2 Provide a variety of grid cabinets, which can be selected according to the actual situation, supporting the cascading of primary and secondary cabinets.
- 3 Can be located to the specific grid, easy to find items.
- 4 Support voice broadcast, simple operation.

Product Introduction

Intelligent tool cabinet, using UHF RFID technology, to achieve intelligent management of maintenance tools, instruments, safety tools, internal space can beFlexible adjustment and configuration, support mesh plate, pole, hook and other internal structures. Can be equipped with constant temperature dehumidifier, monitoring and other extended functions.

Product parameters

Inventory method	Display size	Operating system	Internal structure
UHF RFID	14'' touch display	Android/Windows	5 layers are standard
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	2031mm*1100mm* 554mm

Product Introduction

For intelligent control of items (tools/documents/books/clothing/personal items, etc.), self-service loan and return. Cabinet real-time inventory of items in the cabinet, record the information of the door opener, and upload in real time. Save manual inventory time and warehouse registration procedures, effectively improve control efficiency.

Product parameters

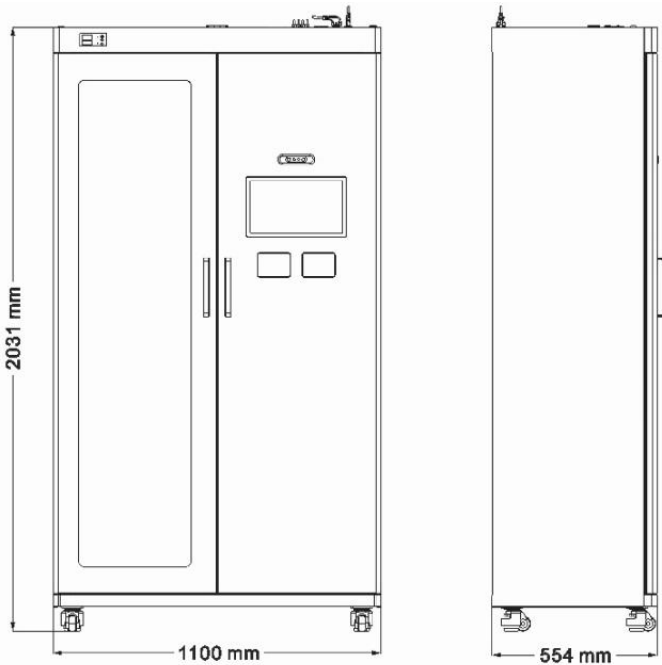
Inventory method	Display size	Operating system	Internal structure
UHF RFID	10.1'' touch display	Android/Windows	Main: 22 grids Deputy: 24 grids
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	2030mm*1600mm* 500mm

RFID
Weight Cabinet



CK-GGT1

Size



Peculiarity

- 1 RFID technology, unattended, 24 hours operation, RFID technology to work with ID identification, to achieve electronic management.
- 2 Man-machine communication operation is simple, support face recognition, brush card permissions, interactive sense of strong, simple operation.
- 3 Automatic management of tool life cycle and inspection cycle.
- 4 Tools out, storage automatic identification record, to the time auto matic reminder of non-return.

Product Introduction

Based on RFID/ weighing automatic identification technology, it can realize the functions of real-time inventory, intelligent access, inspection reminder, real-time search, language broadcast and abnormal warning. Using RFID/ weighing intelligent identification technology, unattended, can run 24 hours, man-machine communication is simple, strong sense of interaction, stable performance.

Product parameters

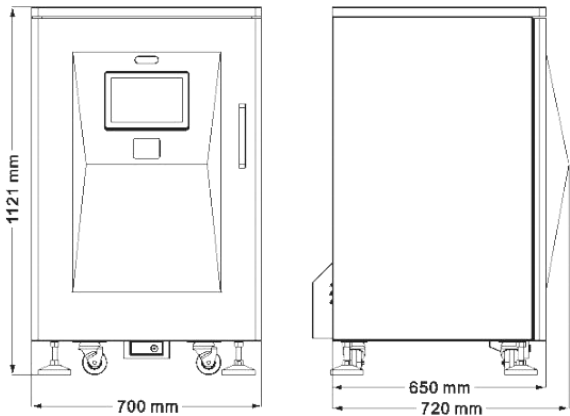
Inventory method		Display size	Operating system	Internal structure
UHF RFID/Weight		14'' touch display	Android/Windows	4 layers are standard
Communication	Power	Frequency	Size	
Rj45	AC 220V	840MHz-960MHz	2031mm*1100mm* 554mm	

RFID Cabinet
(Outside)



CK-GT3B

Size



Peculiarity

- 1 Outdoor control tools, waterproof, rain, moisture.
- 2 Man-machine communication operationis simple, support face recognition, brush card permissions, interactive sense of strong, simple operation.
- 3 Automatic management of tool life cycle and inspection cycle.
- 4 Tools out, storage automatic identification record, to the time auto matic reminder of non-return.

Product Introduction

Mainly suitable for outdoor inventory of tools, and rapid inventory of tools, greatly improve the accuracy and efficiency of tool management, and realize the fine control of tools by enterprises.

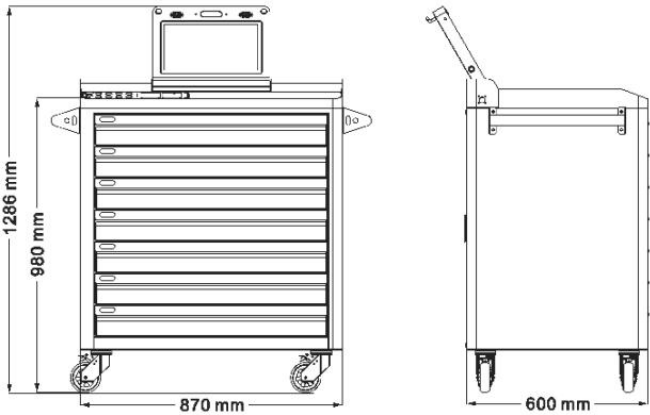
Product parameters

Inventory method		Display size	Operating system	Internal structure
UHF RFID		10.1'' touch display	Android/Windows	2 layers are standard
Communication	Power	Frequency	Size	
Rj45	AC 220V	840MHz-960MHz	1 121mm*700mm*650mm	



CK-GTC7A

Size



Peculiarity

- 1 Automatic tool entry and exit record eliminating manual scanning and entry of tedious and possible mistakes.
- 2 Tool data logging, calibration cycle reminders for specific tools.
- 3 When the tool is not returned in time, the tool car will issue a warning to quickly lock the responsibility of the relevant personnel.
- 4 With rechargeable battery, full charge can work for more than 18 hours, easy to move.
- 5 Equipped with a physical button to unlock, after logging in, you can open the corresponding drawer as needed, when returning, the tool is close to the sensing area, the corresponding storage layer of the tool can be automatically opened, making borrowing and returning more convenient and efficient.

Product Introduction

The tool cart based on RFID technology can quickly take stock of tools, greatly improve the accuracy and efficiency of tool management, and realize the information management of tools and the fine control of the aviation industry FOD. Through efficient management, timely reminder of tool omissions to ensure the safety of use.

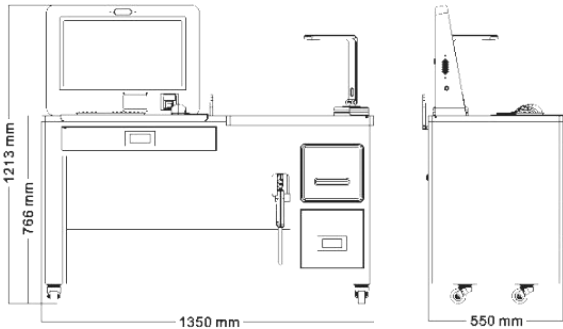
Product parameters

Inventory method	Display size	Operating system	Internal structure
UHF RFID	10.1'' touch display	Android/Windows	7 layers are standard
Communication	Power	Frequency	Size
Rj45、Wi Fi、4G	AC 220V	840MHz-960MHz	1286mm*870mm*600mm



CK-DP13

Size



Peculiarity

- 1 22 inch screen operation experience is strong, visual sense is rich.
- 2 Integrated design reduces equipment redundancy.
- 3 It has EPC tag matching and duplicate tag filtering functions.
- 4 Intensive reading mode.
- 5 Can work independently off the Internet.

Product Introduction

It is used to bind labels to item information entry, do label entry, item scanning, query, record and other functions of the comprehensive management terminal, so that one thing is one code, items can be traced, and the use of records.

Product parameters

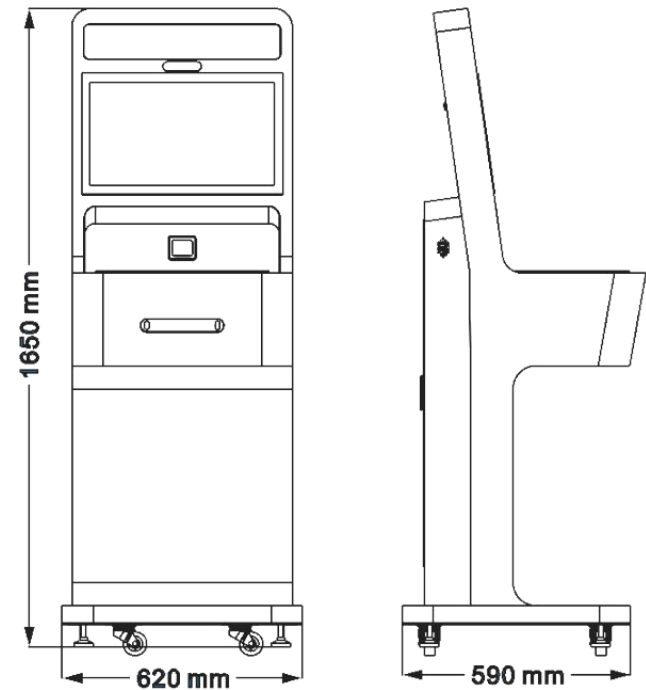
Inventory method	Display size	Operating system	Right
UHF RFID	22'' touch display	Android/Windows	Swipe card, fingerprint, face recognition
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	1213mm*1350mm* 550mm

RFID Kiosk



CK-DP11

Size



Peculiarity

- 1 22 inch screen operation experience is strong, visual sense is rich.
- 2 Realize unmanned borrowing and returning, reduce the troublesome process of manual registration by the administrator, and improve the tool collection rate.
- 3 Equipped with a variety of identification rights, can accurately record the information of the borrower, the responsibility to the person, to ensure the integrity of the tool.
- 4 Tool lead also identification box, identification efficiency is high, can support more than 30 tools at a time.
- 5 Equipped with handheld RFID scanning gun to support rapid identification of large materials.

Product Introduction

Tool return desk, can quickly batch identify returned tools. Equipped with 21.5-inch screen, easy to confirm interaction, equipped with face recognition and other functions, quickly confirm the identity of the recipient, help tool managers to achieve self-service tool access.

Product parameters

Inventory method	Display size	Operating system	Quantity received
UHF RFID	22'' touch display	Android/Windows	≤30 / pcs
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	1650mm*620mm* 590mm

RFID Kiosk Wall-hung



CK- DP4

Size



Peculiarity

- 1 22 inch screen operation experience is strong, visual sense is rich.
- 2 Realize self-unmanned loan and return, reduce the troublesome process of manual registration by the administrator, and improve the loan and return rate of tools.
- 3 Equipped with a variety of identification rights, can accurately remember.

Product Introduction

Provide convenient operation mode, equipped with RFID identification scanning area, so that workers can complete the tool borrowing and returning operation by themselves, with a graphical friendly operation circleThe system supports Chinese and English language switching, making the process more simplified and efficient.

Product parameters

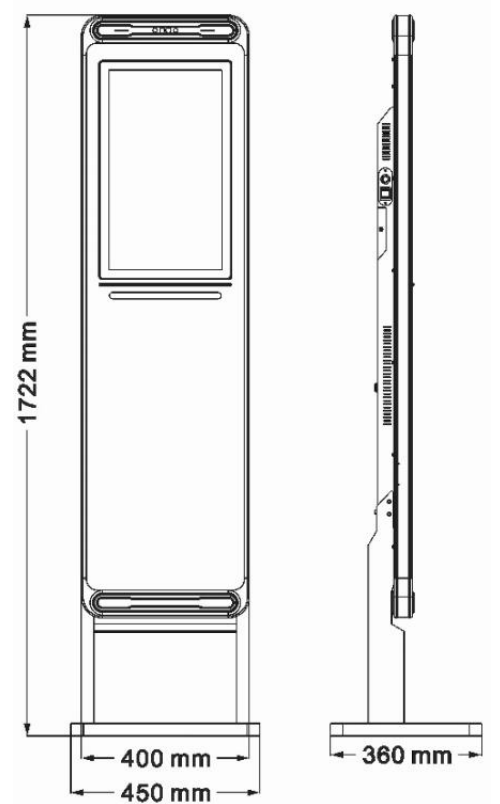
Inventory method	Display size	Operating system	Alarm
UHF RFID	22'' touch display	Android/Windows	Sound light alarm
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	830mm*400mm*78mm

RFID
Kiosk



CK-DP4A

Size



Peculiarity

- 1 With a near-field antenna, the identification efficiency is enhanced, and more than 50 items can be identified at a time.
- 2 Optimized design of special antenna, the peripheral crosstalk control is less than 80cm, which perfectly solves the problem of crosstalk and missed read.
- 3 22-inch HD touch screen is used for interaction, and data transmission can be carried out through network ports.
- 4 Integrated design, fashion appearance, user-friendly operation interface and process design, easy to operate.

Product Introduction

The equipment is mainly used for hospital consumables, tool warehouses, unmanned supermarkets or warehouses in unattended scenarios, etc., to carry out batch RFID reading, code scanning, settlement integrated equipment, when receiving items, quickly identify item information through self-identification workstations and update item information data.

Product parameters

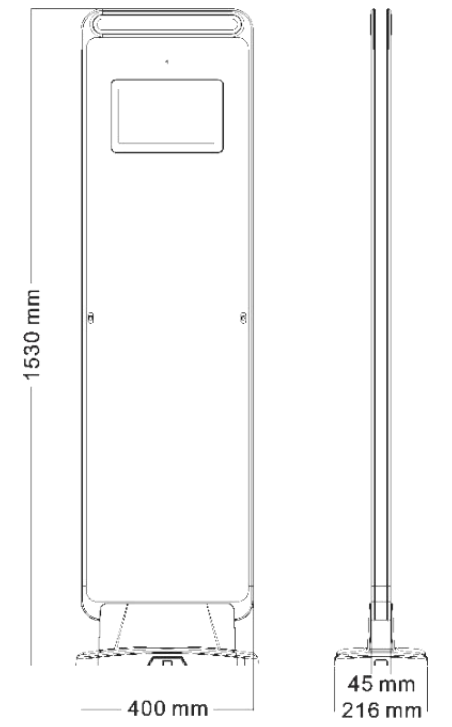
Inventory method	Display size	Operating system	Quantity received
UHF RFID	22'' touch display	Android/Windows	≤50 / pcs
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	1772mm*400mm*360mm

RFID Gate



CK-T4

Size



Peculiarity

- 1 Strong multi-label reading ability, very low miss rate and misread rate.
- 2 Antenna specially designed, access control coverage area accurate, no blind spots.
- 3 Built-in alarm light and buzzer to alert the operator.
- 4 The access control placement distance is wider, up to 2.4m.
- 5 The display can be configured to display the RFID information and quantity in real time, and the number of people can be counted.

Product Introduction

Appearance is simple and atmospheric, stable quality, reliable performance, support multi-label reading, infrared trigger reading mode, support the number of people in and out of statistics, integrated sound and light alarm as one, can use online/offline EAS alarm two modes, the device supports network port communication, and can expand Wi Fi, 4G and other communication methods.

Product parameters

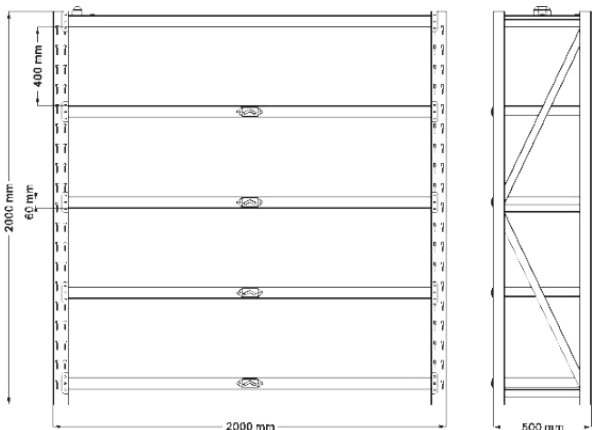
Inventory method	Display size	Operating system	Read distance
UHF RFID	10.1'' touch display	Android/Windows	0-240cm
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	1530mm*425mm*216mm

RFID Shelf



CK-H1

Size



Peculiarity

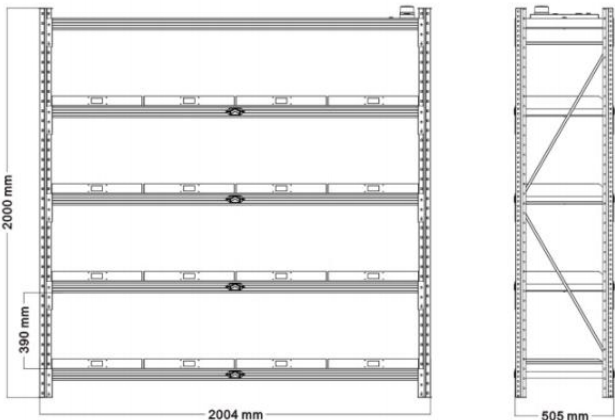
- 1 Integrated RFID tool layer, integrated, beautiful appearance.
- 2 It can realize the function of layered inventory and whole frame inventory check.
- 3 Light up according to the type of tool received.
- 4 Network communication, easy networking and deployment in the warehouse.

RFID Weight Shelf



CK-HG1

Size



Peculiarity

- 1 Integrated RFID tool layer, integrated, beautiful appearance.
- 2 It can realize the function of layered inventory and whole frame inventory check.
- 3 Light up according to the type of tool received.
- 4 Network communication, easy networking and deployment in the warehouse.

Product Introduction

The intelligent shelf based on RFID technology is mainly used for the quick inventory of maintenance tools and instruments in the warehouse. Realize the data check and update of the whole library. RFID smart shelves can also be combined with wall-mounted all-in-one machines to achieve self-service operation of single-shift group receipt, easy to use.

Product parameters

Inventory method	Surface Treatment	Internal structure	Quantity received
UHF RFID	Powder and paint	4 layers are standard	0-200 pcs/layers
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	2000mm*2000mm* 500mm

Product Introduction

The intelligent shelf based on RFID/ weighing technology is mainly used for the quick inventory of maintenance tools and instruments in the warehouse. Realize the data check and update of the whole library. RFID intelligent weighing shelf can also be combined with a wall-mounted all-in-one machine to achieve self-service operation of single shift group receiving, easy to use.

Product parameters

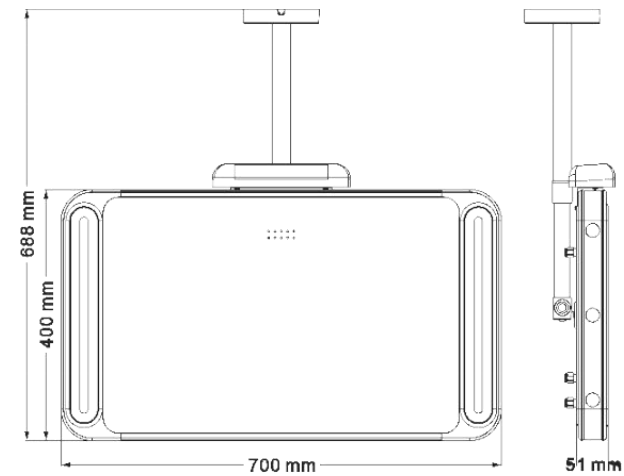
Inventory method	Surface Treatment	Internal structure	Quantity received
UHF RFID/Weight	Powder and paint	4 layers are standard	0-200 pcs/layers
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	2000mm*2004mm* 505mm

RFID Reader
Ceiling Type



CK-H10

Size



Peculiarity

- 1 The group reading ability is strong, the reading distance is far, and the reading speed is fast.
- 2 Integrated audible and visual alarm for applications requiring alarm.
- 3 High appearance level, small size, integrated reader and antenna and one.
- 4 Automatic objects in and out of the records management, save manual scanning and entry work tedious and error.

Product Introduction

Used for warehouse entry and exit management, placed on the top of the warehouse entry and exit, used to identify items in and out, using narrow beam antenna design, reasonable control of reading range, to avoid misreading. Integrated sound and light alarm, real time can be illegal in and out of the label alarm prompt.

Product parameters

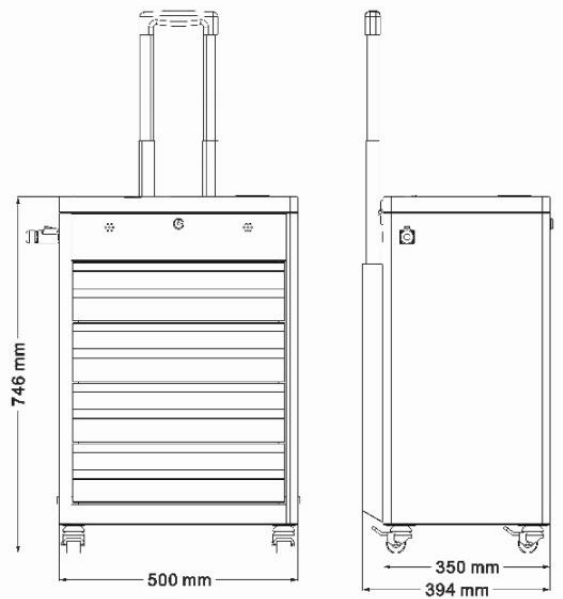
Inventory method	Read distance	Recognition speed	Installation mode
UHF RFID	0-10m	> 500t/S	Bracket fixation
Communication	Power	Frequency	Size
Rj45, RS232,Wi Fi (customizable)	DC 12V/5A	840MHz-960MHz	700mm*400mm* 51mm

RFID Toolbox



CK-B3

Size



Peculiarity

- 1 The tools in the toolbox can be placed at will, and the tools in the box can be locked with one key.
- 2 Departure automatic inventory, the operator carries the toolbox to leave the real-time automatic detection of the number of tools, intelligent reminder.
- 3 Real-time alarm, once a tool is missed in the scene, the toolbox detects the alarm reminder.
- 4 Data transmission through the network port or 4G, can be set up toolbox, according to the need to adjust the function.

Product Introduction

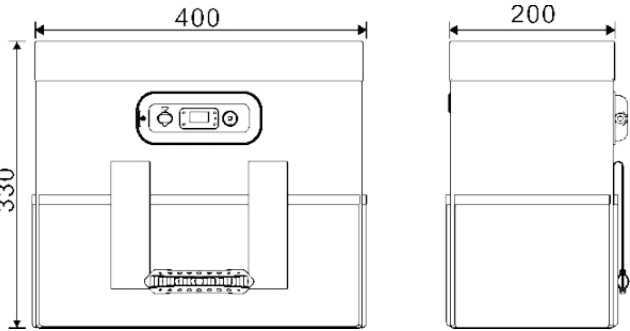
Based on RFID automatic identification technology, the functions of leaving inventory and omission reminder of maintenance tools can be realized to avoid safety accidents caused by the omission of maintenance tools in field operations.

Product parameters

Inventory method	Display size	Operating system	Capacity of products
UHF RFID	10.1" touch display	Android/Windows	80pcs
Communication	Power	Frequency	Size
Rj45	AC 220V	840MHz-960MHz	746mm* 500mm*394mm



Size



Peculiarity

- 1 Support RFID function , automatic identification , 2 seconds inventory is completed.
- 2 Multifunctional storage tool , built-in Velcro storage bag , up to 40pcs of storage tools , also can be customized storage bag.
- 3 When the toolkit moves , if the detection tool is missing , the toolkit will automatically alarm and remind.
- 4 Ultra-low power standby, ultra-long battery life , battery life can reach more than 7 days ,
- 5 Connect the mobile APP through Bluetooth , and configure the parameters of the toolkit through the mobile terminal .
- 6 Outdoor waterproof material , wear-resistant , anti - manufacturing , the whole package is light .



CK-B1

Product Introduction

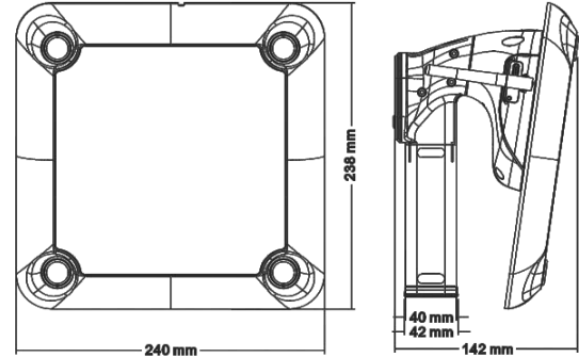
Designed for aviation aircraft maintenance, fire protection, nuclear power, railway rail transit and industrial production and other applications. The tool installs the unique RFID tag, through RFID automatic identification equipment, automatic counting, recording and searching tools, effectively prevent and eliminate aviation, power and industrial enterprise accidents.

Product parameters

Inventory method	Display size	Operating system	Quantity received
UHF RFID	0.96 'OLED	RTOS	≥40 pcs
Communication	Power	Frequency	Size
Bluetooth 5.0	DC 5V	840MHz-960MHz	330mm*400mm*200mm



Size



Peculiarity

- 1 Excellent performance Based on the Impinj R2000 chip development , support a variety of protocols: ISO 18000-6C/EPC C1G2 , ISO 18000-6B , GB/T29768-2013 , Military logo (extensible support) .
- 2 6000mAh battery, working time is more than 12 hours.



CK-B9

Product Introduction

Used for remote tool lookup, inventory and other scenarios. It can read more than 10 meters, and transmit and display data through Bluetooth and mobile phone. It is convenient to find the lost tool in a directional way, find it in time, and avoid the occurrence of safety accidents.

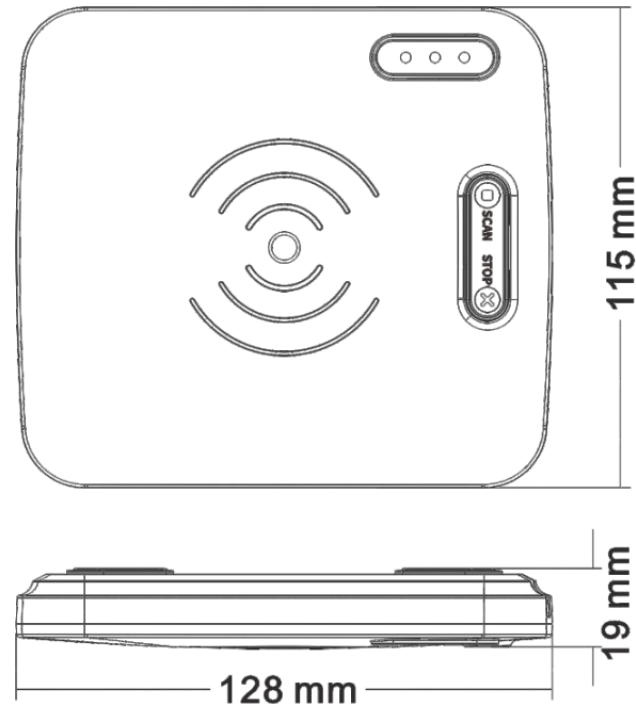
Product parameters

Inventory method	Worktime	Read distance	Class of protection
UHF RFID	>1 2h	≥10m	Ip65
Communication	Power	Frequency	Size
Wi Fi	6000mAh	840MHz-960MHz	240mm*238mm*142mm



CK-D1L

Size



Peculiarity

- 1 Compact and portable , convenient to use in practical work .
- 2 Stable writing, the maximum output of the port is 33dBm, the success rate of writing is high, and the performance of the device is stable.
- 3 Using near-field antennas , the effective read range is controlled within 30cm and the write range is controlled within 10cm .
- 4 Convenient development, provide C# and Java development information.

Product Introduction

The desktop tag distributor is used to initialize the binding of RFID tool tags and tools. It has the function of reading and writing. It can switch to the cursor output mode to facilitate the sorting of EXCEL tool tables and the input of RFID tag information. TYPE-C communication.

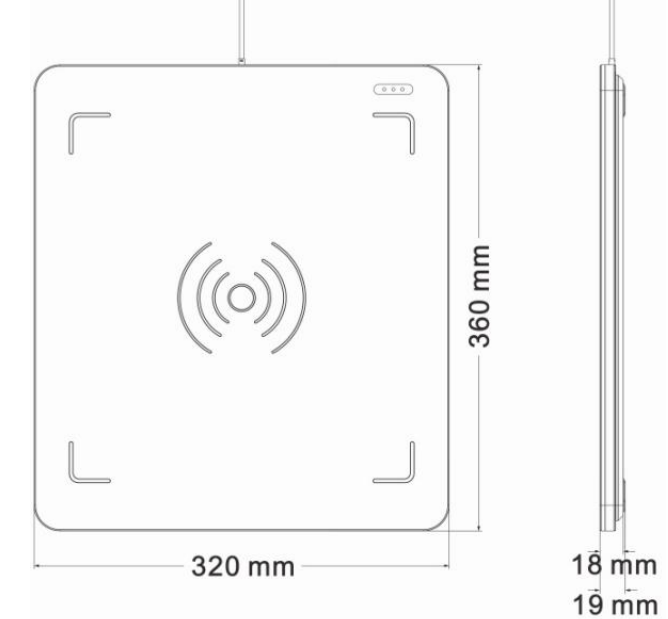
Product parameters

Inventory method	Read distance	Color	Write Sound
UHF RFID	< 30cm	White 、 silver	Bee
Communication	Power	Frequency	Size
Type-C	USB	840MHz-960MHz	1 15mm*128mm*19mm



CK-D3L

Size



Peculiarity

- 1 Advanced tag collision processing algorithm, high reading rate.
- 2 Fully supports electronic tags conforming to EPC CLASS1 G2, ISO18000-6C/6B standards.
- 3 Stable writing, the maximum output of the port is 33Bm, the success rate of writing is high, and the performance of the device is stable.
- 4 Support tag intensive reading and writing, multi-tag identification, support tag data filtering, support RSSI: perceived signal strength.
- 5 Using near-field antennas, the effective read range is controlled within 40cm and the write range is controlled within 10cm.

Product Introduction

It can be used as a tag binding platform or batch reading device to manage RFID tools and instruments. It has strong batch reading ability, supports intensive reading, and has fast recognition speed. It can identify more than 100 tags within 1 second.

Product parameters

Inventory method	Recognition speed	Read module	Read distance
UHF RFID	≥40pcs	Dense read	0mm-400mm
Communication	Power	Frequency	Size
Type-C	USB	840MHz-960MHz	320mm*360mm*19mm



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