



# **RFID IOT APPLICATION**

**Product Catalogue** 

**Application process** 







**Project Sales** 









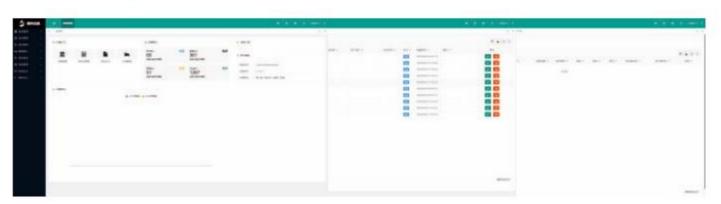


# Overview of the Plan

By giving each piece of textile a unique RFID tag, starting from the textile put Into use, until the textile is scrapped, RFID laundry management solution can realize the intelligent management of the entire life cycle of the textile, covering delivery, dispensing, return, handover, laundry, packing and sorting and other steps. Through RFID intelligent devices, the management of each steps to speed up the turnover speed, greatly improving management efficiency.



# RFID Laundry Management Solution



# Match RFID tag



Item Name	EPC No.	Size	Date of first use	Owners
Scrub Top	E20191029041	S	2019-04-07	xxxxxxx

## **Enroll textile information**



# Laundry Factory Management

Laundry factories use RFID handhelds for quick handover and receipt of goods from the textile receiving. After the textiles are transported to the plant, an RFID c onveyor will be needed for quick batch review. When Laundry is completed, sorting is performed by RFID sorting and packing stations. In the batch out of the warehouse, the use of RFID inventory cabinets on the textile cart for batch inventory review.



#### Handover

quick confirmation for textile receiving



# Conveying

Reconfirmation for recieving with a RFID conveyor



#### **Batch stock out**

Laundry cart scanning



## Sorting and packing

RFID workstation for sorting and packing





# Handover Inventory Device

#### RFID handheld reader





04

#### **Product Features**

#### **Good performance**

It can work well even with soiled/ wet clothes.

#### Inventory speed

It can detect 200 pcs in 1 second.

#### **Battery life**

5600mAh battery capacity.

#### Integrated design

It has embeded reader and antenna w-ith high gain.

#### Bluetooth

bluetooth communication with smart phone.

reading speed	≥200pcs/s	communication	bluetooth
scanning mode	triggered by scanning button	antenna gain	9dBi
battery capacity	5600mAh	dimension	240mm*142mm*238mm

# Laundry Receiving Confirmation Devices



#### **Product Features**

#### Real time scanning

This equipment is suitable for inventory review in the front channel of manual sorting on the convey or to c -heck the quantity of goods received.

#### Quick scan

scan the textile when they pass through the conveyor.

#### **Easier confirmation**

It has a 14" touch screen which allows people to check the scanning result immediately and import receiving list for confirmation.

# Operating process

Real time scanning scan the textile data in realtime when it pass through the conveyor.

# Scanning automatically



# Confirm the information



End

#### Controllable

It can be connected to existing conveyor lines to maintain consistent speed.

#### High efficiency

opening design for better operation.

#### **Textile quantity**

the users can import receiving list for c -onfirmation.

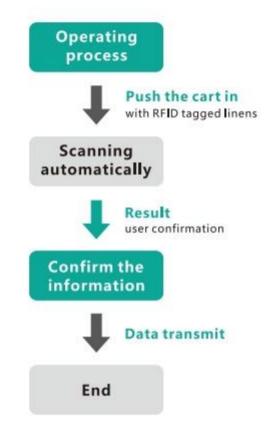
# **Production Specifications**

reading speed	≥50pcs/s	Scanning mode	real time scanning
Screen size	14" touch screen	RFID leakage	≤1.5m
Internal dimension	820mm*850mm*500mm	External dimension	930mm*900mm*500mm

# Laundry Receiving Confirmation Devices

## RFID box counting cabin





#### **Product Features**

#### **Batch scanning**

up to 400 pcs in one scanning.

#### **Blocking performance**

less than 30 cm.

#### Scanning cart

Equipped with mobile cart for esier operation.

#### Quick scanning

scanning within 10 seconds.

#### Cost effective

maual operation.

#### Auto scanning

triggered and scan automatically.

Scanning speed	≥400pcs/s	Screen size	14" touch screen
Door	serve as scanning cart	RFID leakage	≤30cm
Internal dimension	640mm*700mm*1400mm	External dimension	760mm*834mm*1858mm

# Device for Packing Confirmation

## **RFID Desktop Reader**



#### **Product Features**

#### Desktop type

serial or Ethernet connection.

#### Multiple sizes

we provide such desktop reader in different sizes.

## **Production Specifications**

Scanning qty	≥30 pcs/scan, within 3s	RFID leakage	≤50cm
Power	DC 12V 4A	Communication	USB/ Rs232
dimension	800mm*600mm*27mm		

# **RFID** cart for Packing



#### **Product Features**

#### Mobility

Optional for battery for mobility.

#### Desktop

big table with RFID.

## **Production Specifications**

Scanning qty	≥40 pcs/scan, within 3s	RFID leakage	≤50cm
Mobility	with wheels and optional for battery	Power	AC 220V/110V
dimension	800mm*700mm*850mm		

# Device for Packing Confirmation

# **Packing Device A**



## **Product Features**

#### Integrated design

It is equiped with touch screen, face recognition and UHF table.

#### Concentrated scanning

embeded nearfield antenna.

## **Production Specifications**

Scanning qty	≥50 pcs/scan, within 3s	RFID leakage	≤50cm
Access management	face recognition	Screen size	22" touch screen
dimension	800mm*630mm*782mm		

# **Packing Device B**



#### **Product Features**

#### Batch scanning

up to 100pcs in each scan.

#### Shielding design

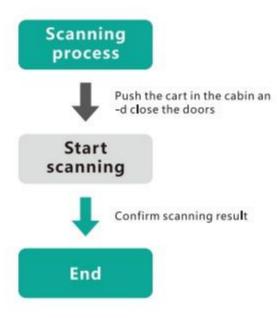
shielding design for better blocking and r-eading performance.

Scanning qty	≥100 pcs/scan, within 3s	Screen size	22" touch screen
Access management	face recognition	RFID leakage	≤25cm
dimension	800mm*700mm*957mm		

# Batch Check-out Devices

# **RFID Scanning Cabin- Manual Doors**





#### **Product Features**

#### Batch scanning

up to 800pcs in each scan.

#### Cost effective

manually-open doors.

#### High reading performance

50times more than traditional method.

#### Quick scanning

scanning within 15s.

#### Small size

specially designed for laundry cart.

#### Auto Scanning

it will start scanning once the doors are closed.

#### **Production Specifications**

Scanning qty	≥800pcs	Screen	22"touch screen
Door	manually open	RFID leakage	≤30cm
Internal dimension	1300mm*1000mm*1990mm	External dimension	1450mm*1220mm*2200mm

# Batch Check-out Devices

# **RFID Scanning Cabin- Auto Doors**





#### **Quick operation**

doors open in 3s.

#### Auto operation

auto doors and scan.

#### Bigger space

capable to support carts in different size.

# Push the cart in the cabin and close the door Start scanning Scanning Confirmation Data transmit End

#### Quick scanning

scan within 15s.

#### High reading performance

50times more than traditional method.

#### AGV

It can work with AGV to improve au -tomation level.

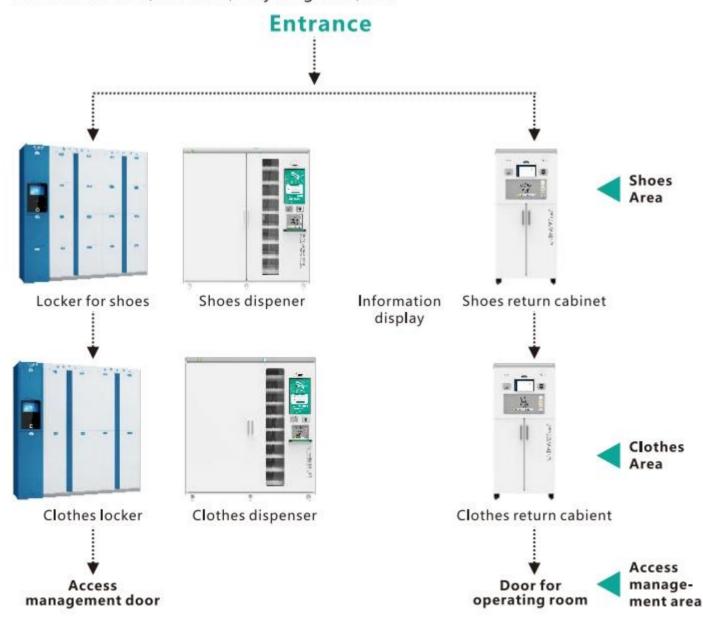
Scanning qty	≥800pcs	Screen	22"touch screen
Door	auto doors	RFID leakage	≤30cm
Internal dimension	1600mm*1260mm*2000mm	External dimension	1800mm*1680mm*2400mm

# Laundry Management for the Operating Room

Intelligent management system for scrubs in the operating room enables the dispensing and returing through automated cabinets. It can replace the traditional mode of operating rooms using manual duty and manual dispensing of clothes.

Through automated dispensing and returing cabinets that can automatically id -entify clothes as well as intelligent lockers, it realizes full-process control over the use of medical scrubs, which can be detected in real time and replenished in a timel -y manner.

Clothing built-in RFID chip, can be issued with the clothes, returned real-time record of the user, use time, recycling time, etc.



#### Behavioral norms in the operating room

Prevent users from leaving the surgical area in gowns at will to reduce the risk of infection. If there is non-standard clothes return, alerts will be given when people obtainingnew clothes from dispensers to guide behavioral norms.

#### **Improve Efficiency**

The dispensing speed is up to 3 seconds and it can assign the size to the user accordingly.

#### Reduce garment loss

By binding the users, the loss rate of hand-washing gowns and surgical shoes is dramatically reduced to less than 1%. Through informationized management and rational distribution, the inventoy readiness of surgical gowns was reduced by 1/3.

#### **Garment tracability**

Through RFID tag, the process of clothing use can be traced; Single set of clothing dispensing through automated cabinet to ensure the cleanliness of garments and avoid pollution.

# Composition of Operating Room Behavior Management System



# Hospital intelligent operating room behavior management scenario



Access management

Auto conveying and open

Data transmit and cloes

smart card / face

recognition

the door

the door

folding and refilling will be easy a-

it is 60cm thick and suitable for na-

Reasonable height for the

no need to bend or squat down w-

Obtaining process

Dispensing

Obtain the

garment

End

Quick refill

nd user friendly.

rrow aisle.

Less space needed

dispensing door

hen obtaining the clothes.

# Garment Management for Operating Room

## RFID garments dispensing/return cabinet



#### **Product Features**

#### Access management

face recognition/ finger print/ smart card.

#### **Quick dispensing**

it can assign the size to the user accordingly.

#### Stock alerts

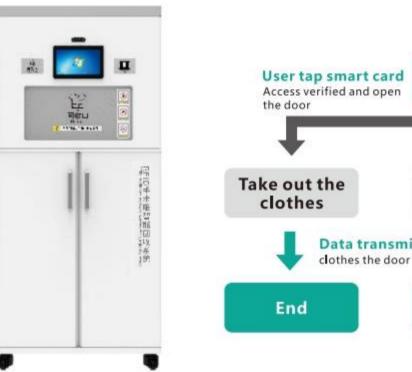
it will give alert to the manager if there stock is low.

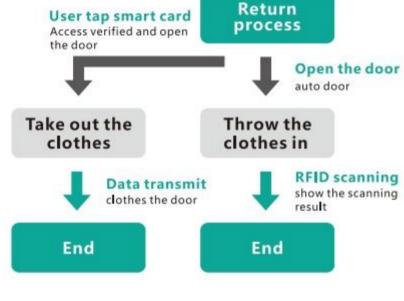
# **Production Specifications**

Cabinet capacity	108 sets of clothes or 88 pairs of shoes	Screen size	22" touch screen
Dispensing speed	3-5s	RFID	supported
management	face recognition/finger print/smart card/ user ID	dimension	1840mm*580mm*1990mm

# Garment Management for Operating Room

#### RFID clothes return cabinet





#### **Product Features**

#### Display

10" touch screen showing the item informations.

#### Auto scan

Scanning and data transmit will be performed when the clothes are threw in it.

#### Full alerts

Alerts will be given once it is full then actions can be taken.

#### Auto door

It will open automatically when it d -etects the clothes at the door

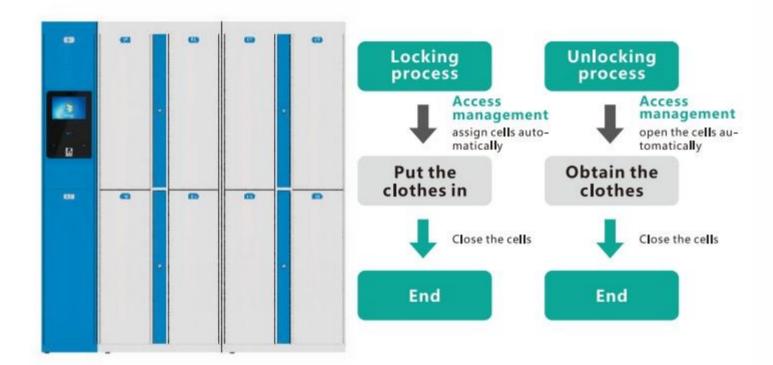
#### Easy collecting

Open the door and pull out the clothes bag the just take it out.

Cabinet capacity	60 sets of clothes / pairs of shoes	Screen size	10.1" touch screen
Return mode	auto open	RFID	RFID
management	smart card/ user ID	dimension	850mm*660mm*1840mm

# Intelligent clothing management in hospital operating rooms

#### Clothes locker



#### **Product Features**

#### Auto assign

assign cells automatically for user.

#### **Access management**

It help to assign and open the cells automatically.

#### Flexible configuratin

no limitation for the quantity of slave cabinets.

#### **High utilization**

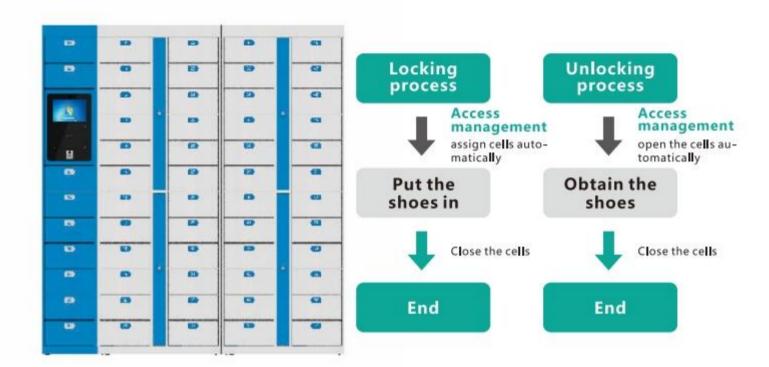
assign the cell by the system and keep the utilization.

#### **Production Specifications**

Cell qty	1 cell for master and 4 cells for slave	Screen size	10.1"touch screen	
management	smart card/ user ID	Emergency key	supported	
Master dimension	450mm*450mm*1800mm	Slave dimension	900mm*450mm*1800mm	

# Intelligent clothing management in hospital operating rooms

#### Shoes locker



#### **Product Features**

#### Auto assign

assign cells automatically for user.

#### **Access management**

It help to assign and open the cells automatically.

#### Flexible configuratin

no limitation for the quantity of slave cabinets.

#### **High utilization**

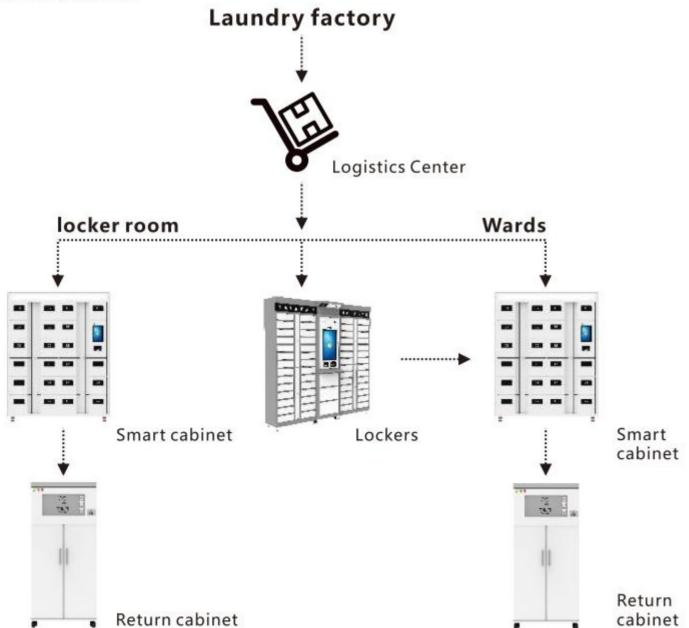
assign the cell by the system and keep the utilization.

Cell qty	6 cell for master and 18 cells for slave	Screen size	10.1"touch screen
management	smart card/ user ID	Emergency key	supported
Master dimension	450mm*450mm*1800mm	Slave dimension	900mm*450mm*1800mm

# **RFID Suits**

# Management in Hospital

Hospital medical staff uniforms and inpatient fabrics can be intelligently managed using RFID. Users need to install RFID tags on each piece of cloth to uniquely identify the clothes, and through intelligent dispensing cabinet for self-service obtaining. Intelligent cabinet real-time monitoring of the state of use, and notify the laundry factory and distribution personnel, according to the use of timely replenishment. The self-service collection is convenient for 24-hour collection and replenishment without time constraints, standardized management, and convenient and fast operation.



# Intelligent clothing management for hospital uniforms

## Suits dispenser-A



#### **Product Features**

#### Auto assign

assign cells automatically for user.

#### Access management

It help to assign and open the cells automatically.

#### Flexible configuratin

no limitation for the quantity of slave cabinets.

#### **High utilization**

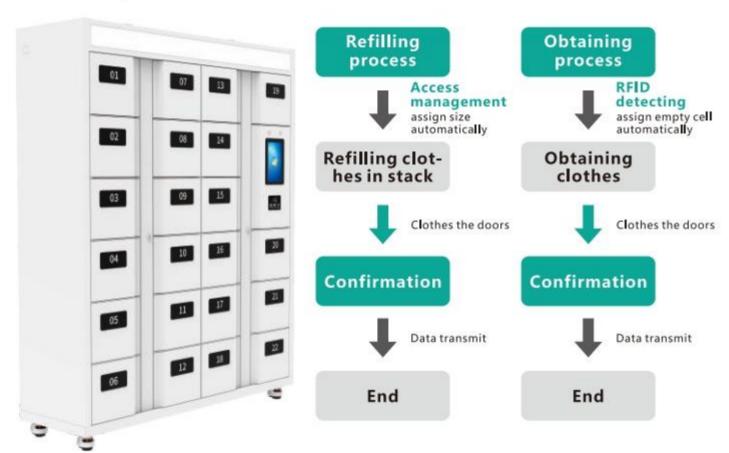
assign the cell by the system and keep the utilization.

Cell qty	6 cell for master and 28 cells for slave*2	Screen size	22"touch screen	
management	smart card/ user ID	RFID	supported	
Master dimension	500mm*500mm*2030mm	Slave dimension	780mm*340mm*2030mm	

## **RFID Suits**

# Management in Hospital

# Suits dispenser-B



#### **Product Features**

#### Large capacity

It can contain multiple clothes in one cell.

#### Flexible configuratin

optional for slaves in different cell sizes.

#### Auto scan

Independent RFID in each cell.

#### Easy refilling

Refilling clothes in stack.

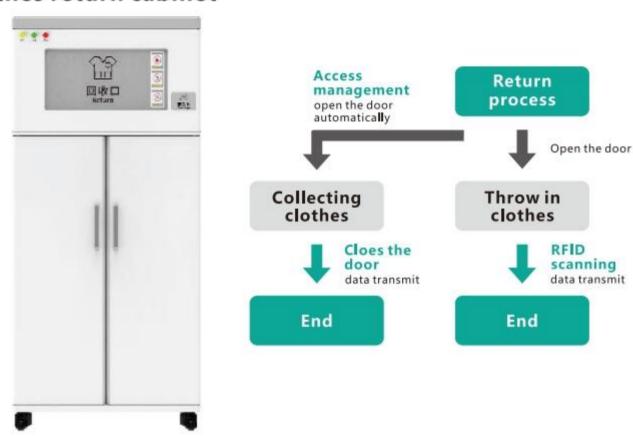
#### **Production Specifications**

Cell qty	up to 24 cells	Screen size	10.1*touch screen
management	smart card/ user ID	RFID	supported and independent RFID in each cell
Cell dimension	331mm*285mm*500mm	Slave dimension	1600mm*600mm*2030mm

## **RFID Suits**

# Management in Hospital

#### Clothes return cabinet



#### **Product Features**

#### Maunal door

push and throw. Easy operation and cost effective.

#### Easy collecting

Open the door and pull out the clothes bag the just take it out.

#### Auto scanning

throw the clothes in and it will start scanning automatically

#### **Full alerts**

Alerts will be given once it is full then actions can be taken.

Capacity	≥50 sets	Indicator	Green-normal; Yellow-abnormal; Red-alarm
Return mode	manual	RFID	supported
management	Smart card	dimension	850mm*660mm*1840mm





## Headquarters

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