



Lightly and Fast ,Lordi

**Smart Warehouse
Series Products**

Smart Needle Butler

AI facial recognition registration, complete operating data record, broken needle accurate identification and recycle, capability to connect with MES、ERP, assist with enterprises to realize the digitization of needle management



Smart Vertical Needle Butler

Values

- 1、Whole-process, unmanned and digitized needle management, saving labor
- 2、Quick and accurate needle pick-up, within 10s
- 3、AI image recognition, accuracy rate of human face and broken needle recognition is higher than 99.9%
- 4、Whole-process accurate, complete record, increasing factory inspection competitiveness
- 5、Fast connection to enterprise information system, help to realize the digitization of needle management

Cabinet size (L*W*H)	84×35×161.5cm
Screen	13.3inch touching panel
Broken needle recognition	AI image recognition, broken needle recognition rate > 99.9%
System registration	Account password, AI face recognition
Extension ports	USB (report import and export)
External communication	WIFI/RJ45
Number of positions	24 sets (30 needles can be stored for each set)
Numbers of locks	3 sets(broken needle, auxiliary needle, needle supply)
Power supply	220VAC/50Hz, 2A
Basic function	
Smart operation	Unmanned guard, whole process monitoring of purchasing, inbound and recovery
Real-time monitoring	Real-time monitoring of needle pick-up process, and update of warehousing condition
Permissions setting	AI human face recognition, custom setting for persons with different rights
Intelligent report	Multidimensional report, intelligent analysis, needle supply, pick-up and recovery record can be export at any time
Waste separation	Individual port for broken and old needle recovery, realizing the 100% recovery
Voice broadcast	Voice guide for operation, easy usage
Operating Guide	Light guide for needle pick-up, fast to find the position
Supply notice (optional)	Needle shortage alarm, one key to inform supply needles
Waste individual packing (optional)	Every waste needle be packed separately with codes, be corresponding to pick-up record in-time
Data connection (optional)	Capable to connect with ERP, MES, accurate and in-time data uploading

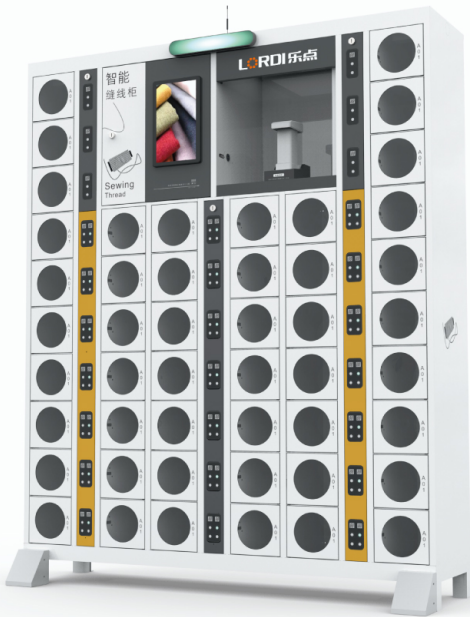


Smart Desktop Needle Butler

Cabinet size (L*W*H)	77.2×35×76.6cm
Screen	13.3inch touching panel
Broken needle recognition	AI image recognition, broken needle recognition rate > 99.9%
System registration	Account password, AI face recognition
Extension ports	USB
External communication	WIFI/RJ45
Number of positions	12 sets (30 needles can be stored for each set)
Numbers of locks	3 sets(broken needle/auxiliary needle, needle supply)
Power supply	220VAC/50Hz, 1.5A
Basic function	
Smart operation	Unmanned guard, whole process monitoring of purchasing, inbound and recovery
Real-time monitoring	Real-time monitoring of needle pick-up process, and update of warehousing condition
Permissions setting	AI human face recognition, custom setting for persons with different rights
Intelligent report	Multidimensional report, intelligent analysis, needle supply, pick-up and recovery record can be export at any time
Waste separation	Individual port for broken and old needle recovery, realizing the 100% recovery
Voice broadcast	Voice guide for operation, easy usage
Operating Guide	Light guide for needle pick-up, fast to find the position
Supply notice (optional)	Needle shortage alarm, one key to inform supply needles
Data connection (optional)	Capable to connect with ERP, MES, accurate and in-time data uploading

Smart sewing thread cabinet

Intelligent recognizing the fabric and thread color, help to find the correct color number, light to guide the position, data support of hundreds thread suppliers, good feedback of hundreds users, realizing the fast thread matching and whole process monitoring



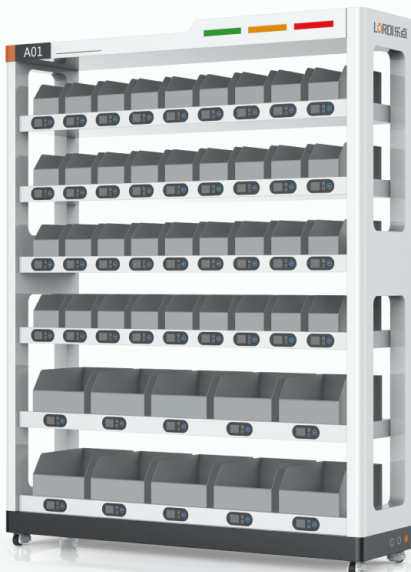
Value

- 1、 smart color matching, 5s to find the thread color position
- 2、 light indication increase efficiency by over 80%
- 3、 accurate thread pick-up, error rate is low as 0.03%
- 4、 precise storage condition, full record, no need to wait
- 5、 standard storage, improve company image
- 6、 data support of hundreds thread suppliers, good feedback of hundreds user

Cabinet size (L*W*H)	Main cabinet: 143.5×35×177cm (Customized) auxiliary cabinet:96×35×177cm
Screen	11.6 inch touching panel
Identification method	color+image recognition, pure color accuracy>98%
Authentication method	Account password (optional human face recognition)
Extension ports	1,USB (report import and export)
External communication	WIFI/RJ45
Number of positions	Main cabinet: 48 electric lock cabinets(12pcs thread can be stored in each cabinet) Auxiliary cabinet: 40 electric lock cabinets(12pcs thread can be stored in each cabinet)
Power supply	220VAC/50Hz, 2A
Basic function	
Smart color matching	Scan the fabric, auto color matching, cabinet auto opening and closing after confirming
Real-time monitoring	Real-time pick-up record and warehousing condition update
Permissions setting	Custom setting for persons with different rights
Intelligent report	Multidimensional report, intelligent analysis, thread stock, pick-up frequency information can be export at any time
Voice broadcast	Voice guide for operation, easy usage
Inventory display	Real-time warehousing data display, adjust the pick-up qty directly
Data connection (optional)	Capable to connect with ERP, MES,WMS, with high accuracy to group, garment type no. and process.
Application	sample cloth room/technical center, sample clothing workshop, small order factory, retail stores, etc

Smart integrated shelf

Redefining the traditional shelf, the integrated structure is free of installation, with full color LCD labels and wireless network communication, helping traditional warehouses quickly achieve digital management.



Value

- 1、 thread pick-up with light indicator, increase efficiency by over 52%
- 2、 accurate pick-up, error rate is low as 0.03%
- 3、 with 30min training, green hand can be experienced worker
- 4、 thread pick-up is stock checking at same time, check time can be shortened by 62%
- 5、 Full operation record, 1s to upload automatically
- 6、 Full information display, customized content

Cabinet size (L*W*H)(customized)	150×60×190cm
Cabinet material	Cold rolled steel plate/stainless steel plate, etc
Outlook color(customized)	Customized based on demands
Cabinet electronic tag	LCD display, 7-color RGB, up and down plus and minus buttons
Number of positions (customized)	32 cabinets (L*H=17*19cm) 10 cabinets (L*H=27*24cm)
Power supply	220VAC/50Hz, 2A
Basic function	
Smart guide	Choose the material, and corresponding cabinet light and label indicator light will be on, press button to confirm after taking it out.
Real-time display	Real-time material information display, customized display content as material code, stock, naming
Real-time monitor	Real-time material inbound and outbound process, stock information update at same time
Intelligent report	Multidimensional report, intelligent analysis, material stock, inbound and outbound record can be export at any time
Data connection	Capable to connect with ERP, MES,WMS
Application	Various manufacturing and processing enterprise parts warehouses, retail stores, factory spare parts, etc

Smart parts cabinet

The smart parts cabinet uses lights to guide the location of parts, labels to prompt picking and placing quantities, and automatic sensing of picking and placing. It doesn't increase the workload and completes the picking, placing and management of materials accurately and easily.

Value

1. Look at the lights and colors to get the goods, the efficiency increases by more than 52%;
2. Get goods accurately, with error rate as low as 0.03%;
3. All operations are recorded, automatically synchronize data in 1 second.



Cabinet size (L*W*H)	Main cabinet: 95.4×40×195.6cm
Drawer size/number	L*H=20.1*12.3cm(32pcs)
	L*H=43.2*12.6cm(2pcs)
Glass cabinet door size	L*H=89.4*59.6cm(2layers)
Color/LOGO	Customized on demand
Cabinet material	Cold rolled steel plate/stainless steel plate, etc.
Electronic labels	2-digit digital display, 4-digit LED indicator for sub-storage locations
Power supply	220VAC/50Hz, 1.5A
Basic function	
Wisdom guidance	Select the parts to be taken and placed, the corresponding cabinet lights and drawer or cabinet door lights will light up, and the inventory will be updated automatically when the drawer is closed.
Operation display	Each part corresponds to a guide light, and each drawer corresponds to 2-digit number, which displays the pickup location and quantity in real time.
Real time monitoring	Real-time monitoring of parts inbound and outbound, and real-time inventory update.
Smart report	Multi-dimensional reports, intelligent analysis, parts inventory, inbound and outbound records can be checked at any time
Data docking	Can be connected with ERP, MES and WMS data
Scene adaptation	Applicable to parts retail stores, factory's spare parts, etc.

Intelligent workstation cabinet

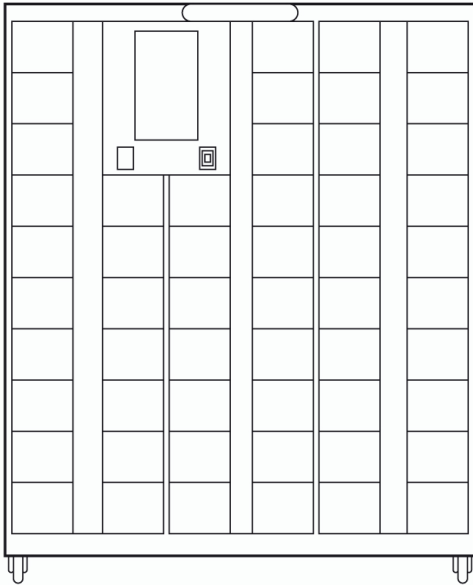
Intelligent password-protected workstation cabinet, support WIFI connection, can store technical documents, personal belongings, and confidential materials. It support docking with MES and ERP software to achieve unified distribution management of materials.



Cabinet size (L*W*H)	50×25×65cm
Number of electric lockers	4 pcs (grid size can be customized)
Color/LOGO	Customized on demand
Cabinet material	Cold rolled steel plate/stainless steel plate, etc.
Power supply	12VDC, 3A (Battery optional)
Basic function	
Display method	6-digit digital display with definable settings
Cabinet opening method	Password to open cabinet door and remote control
Data docking	Can be connected with ERP, MES, and WMS data, accurately synchronize to groups, style numbers, and processes.
Other functions	USB mobile phone charging, water cup storage rack, temporary storage table
Scene adaptation	Sewing station, office station, etc.

Smart tool cabinet

The smart tool cabinet has built-in LCD touch screen which provide convenient and direct operation to pick and return tools. It also integrates card authentication, material scanning and identification and other technologies to achieve precisely manage access. It can achieve personnel management, tool management, borrowing times, inventory status, borrowing and returning records, smart cabinet management and other operations with the backend tool management system, and can store and query detailed records (personnel, time, items, picking/returning, location of picking /return).



Cabinet size (L*W*H) (customizable)	Main cabinet: 143.5×35×169cm Auxiliary cabinet: 96×35×169cm
Cabinet material	Cold rolled steel plate/stainless steel plate, etc.
Appearance color (can be customized)	Customized on demand
Number of positions (can be customized)	48 main cabinets/40 auxiliary cabinets, with doors and locks
Position size(L*W*D)	15×15×35cm (can be customized)
Main cabinet controller	11.6-inch touch screen, Windows industrial computer
Extension ports	1pcs, USB (RFID, printer, etc. optional)
External communications	WiFi/RJ45
Main cabinet/auxiliary cabinet communication	High-speed bus/wireless narrowband, master-slave control
Power supply	220VAC/50Hz, 2A
Basic function	
Login Method	Account password, card login
Picking Method	Scan the code or manually select the material to open the door
Storage function	The system allocates the grid or selects the grid for storage.
Permission settings	Different personnel, different permissions, customized settings
Material trajectory	Real-time monitoring, you can check the material collection track at any time
Smart report	Data recording, intelligent analysis
Storage capacity	Can be expanded wirelessly, one main cabinet operates with multiple auxiliary cabinets
Material identification (optional)	Image recognition, code scanning recognition
System docking	Can be connected with ERP, MES, and WMS data to receive work orders

Thread color matching and thread finding system

The thread color matching and thread finding system uses intelligent sensors to identify sample fabrics and thread colors. Combined with the thread management software, it can quickly locate the corresponding manufacturer's thread color number, storage location, inventory quantity, etc., making it easier for staff to make correct and fast decisions of color matching. Supported by thread data from brands such as Coats, AE, Liqing, Dunhuang, and Hudong, hundreds of stores use it with no negative reviews, and through big data collection, the accuracy rate of color recognition is over 99%.

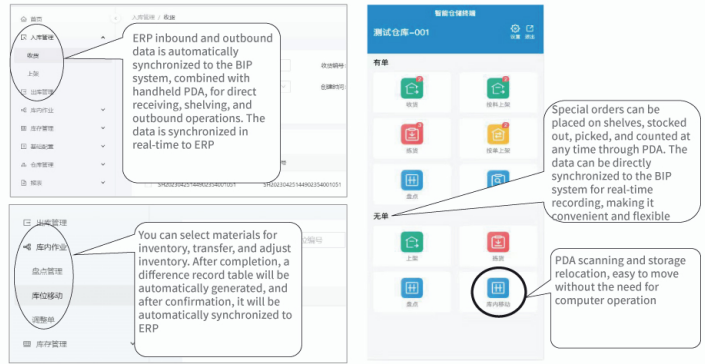


Software operating system	Windows 10 system
Color sensor	1 Bluetooth/USB, solid color card accuracy >98%
Basic function	
Automatic color matching	Scan fabric and automatically match colors
Manual color matching	Known color number, automatically match similar color number
Location reminder	Quickly locate the thread color number without rummaging
Thread hidden	No stock thread color, optional to suspend use
Inventory management (optional)	Inventory status, real-time monitoring, material shortage warning, multi-party replenishment
Intelligent report (optional)	Intelligent analysis of inventory reports and warehouse entry and exit records
System docking (optional)	Can be connected with ERP, MES, and WMS data to receive work orders

BIP Intelligent Warehouse Management System BIP

Intelligent Warehouse Management System BIP is a warehouse management system software designed for factory spare parts and surface auxiliary material warehouses.

BIP integrates with the rapid inventory management system to provide the optimal inventory allocation strategy based on material outbound frequency, automatically calculate the optimal operation path with work orders and electronic labels, and accurately identify and quickly verify electronic labels. At the same time, it utilizes mobile terminal devices to quickly implement picking operations without work orders to cope with constantly changing material management, thereby achieving overall cost reduction and efficiency increase in warehousing, and empowering factories with digitization.



Intelligent tool management system

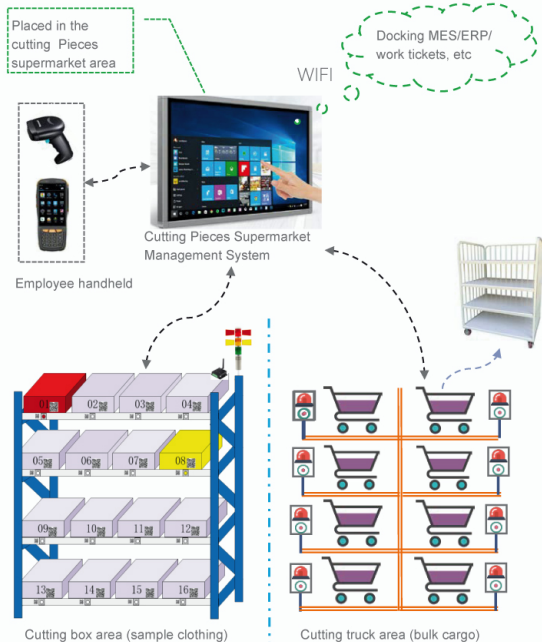
Intelligent Material Management System is a simple and easy-to-use material management system software designed for factory assets and tools.

It has achieved full lifecycle management of materials and tools from purchase, procurement, warehousing, requisition, return, borrowing, return, allocation, change, repair, maintenance, scrapping, etc. The system supports visual data report analysis, custom approval processes, custom forms, employee self-service inventory, employee self-service claim, handover, etc. This provides a strong guarantee for enterprises to leverage the benefits of fixed assets and maintain asset safety.



Cutting Supermarket Management Software

The complete management system of the cutting supermarket achieves timely, accurate, and on-demand distribution of cutting and auxiliary materials to the production line through real-time recording of the batching process and progress of cutting and auxiliary materials, reducing online backlog, avoiding order adjustments or waiting caused by material shortages, and achieving JIT pull production; Make up for data breakpoints between the cutting room, auxiliary material warehouse, and sewing workshop, making business collaboration more timely, accurate, and complete.



Business process: taking the sample clothing system of the version room as an example

- 1 Synchronize work orders, interface with MES/ERP/work ticket and other software, synchronize work orders, and the system will automatically bind the idle cutting box with the work order (automatically detect whether the cutting box is in the warehouse location);
- 2 Select a work order, and the employee selects the work order on the table/PDA (different colors represent different states of the work order), and the corresponding indicator light on the cutting box lights up;
- 3 Execute operations and perform different operations as needed (such as placing, retrieving, returning containers, etc.);

Material placement: ① The compounder selects the work order based on color or PDA scanning ticket to select the work order; ② According to the work order prompts, check the materials and confirm that there are no errors. After confirmation, the cutting box indicator light flashes; ③ The compounder puts the materials into the corresponding cutting box, confirms with the button, and the data is automatically updated; ④ After all materials are complete, notify the workshop to collect them.

Material retrieval: ① The sample worker selects the work order based on color or PDA scanning work order; ② After confirming the work order, the corresponding cutting box indicator light flashes; ③ The sample worker takes away the cutting box, confirms with the button, and the data is automatically updated; ④ Notify MES/ERP/work ticket that material retrieval has been completed.

- 4 Data collaboration: After the operation is completed, the data is automatically updated and synchronized with other software systems (such as ERP, MES, work ticket, PDM).

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