

Circular and Smart Packaging Solutions For Logistics & Warehousing



CONTACT US

www.iepaper.com

info@iepaper.com

COMPANY PROFILE



Less paper more green caring for earth

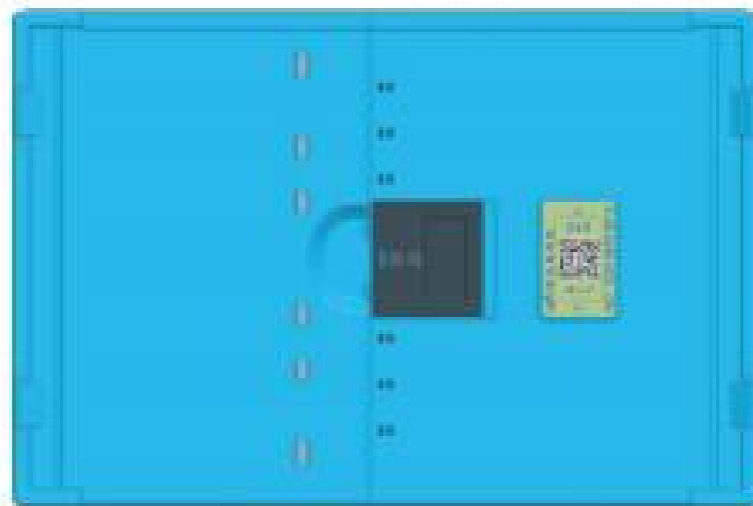
- IePaper is a system integrator focused on ePaper for innovative applications in various industries. The company is committed to achieving a green technology transformation of traditional paper through ePaper display technology, reducing carbon dioxide emissions while digitizing, and building a low-carbon smart interconnected world.
- IePaper products cover various IoT application areas such as smart retail, smart healthcare, smart education, smart office, smart transportation, smart civil aviation, smart industry, and smart logistics, providing related solutions, smart hardware, system integration, and comprehensive solutions.

PRODUCT INTRODUCTION

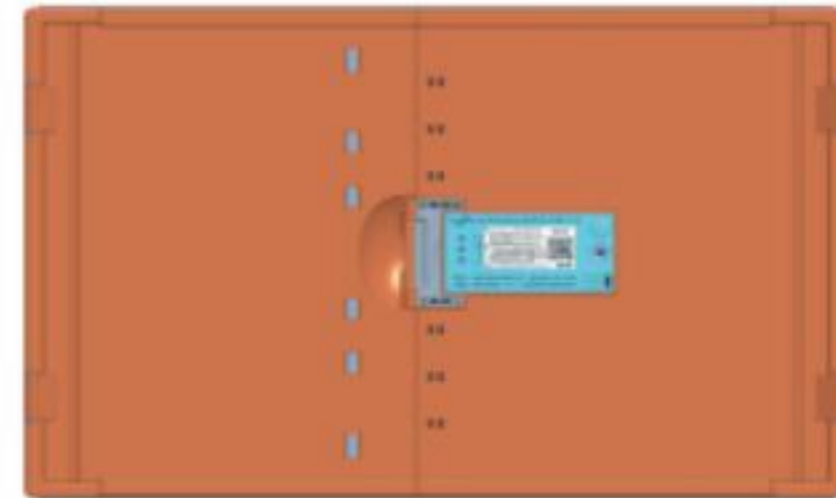
Model M is the mechanical lock model, E is the electronic lock model	GDY5330-M / E		GDY6432-M / E	
Metrics/data	External dimensions	Internal dimensions	outside	inside
Cabinet length / mm Box length / mm	550	515	600	563
Box width/mm	366	331	400	363
Unfold height/mm	296	267	321	298
Folding height/mm	65	0	68	0
Volume product/L	59.6	45.5	77.0	60.9
Folding shrinkage rate	22%		21%	
Box weight/Kg	3.0	3.1	3.2	3.3
Load capacity/Kg	20		25	
box load-bearing/Kg	200		200	
testing standards	ISTA-3A (Load capacity 20kg)		ISTA-3A (Load capacity 25kg)	
Suitable tray size/m	1.1 * 1.1		1.2 * 1.2 & 1.2 * 0.8	
Usage environment	Environmental temperature: M-type (-20 °C~85 °C), E-type (-10 °C~70 °C), electronic lock box reaches IP66 waterproof and dustproof level, making it easy to clean, disinfect and maintain the box. The charging temperature of the electronic lock box battery (5 °C~50 °C) can reach 300 charging times			
service life	The box should be used normally for 2-3 years (excluding prolonged outdoor exposure, UV accelerated material decomposition and aging), and the electronic lock box should be used normally for 4-5 years.			
Box materials and environmental friendliness	The box is mainly made of PP+PE+PA66+GF composite material by injection molding, which is environmentally friendly, non-toxic, and odorless.			
Low carbon characteristics	Recycling and manufacturing (damaged, discarded, old box materials can be recycled and reused) Granular and dual carbon reduction.			

PRODUCT PICTURE

- **Mechanical lock 3D image**



- **Electronic lock 3D image**

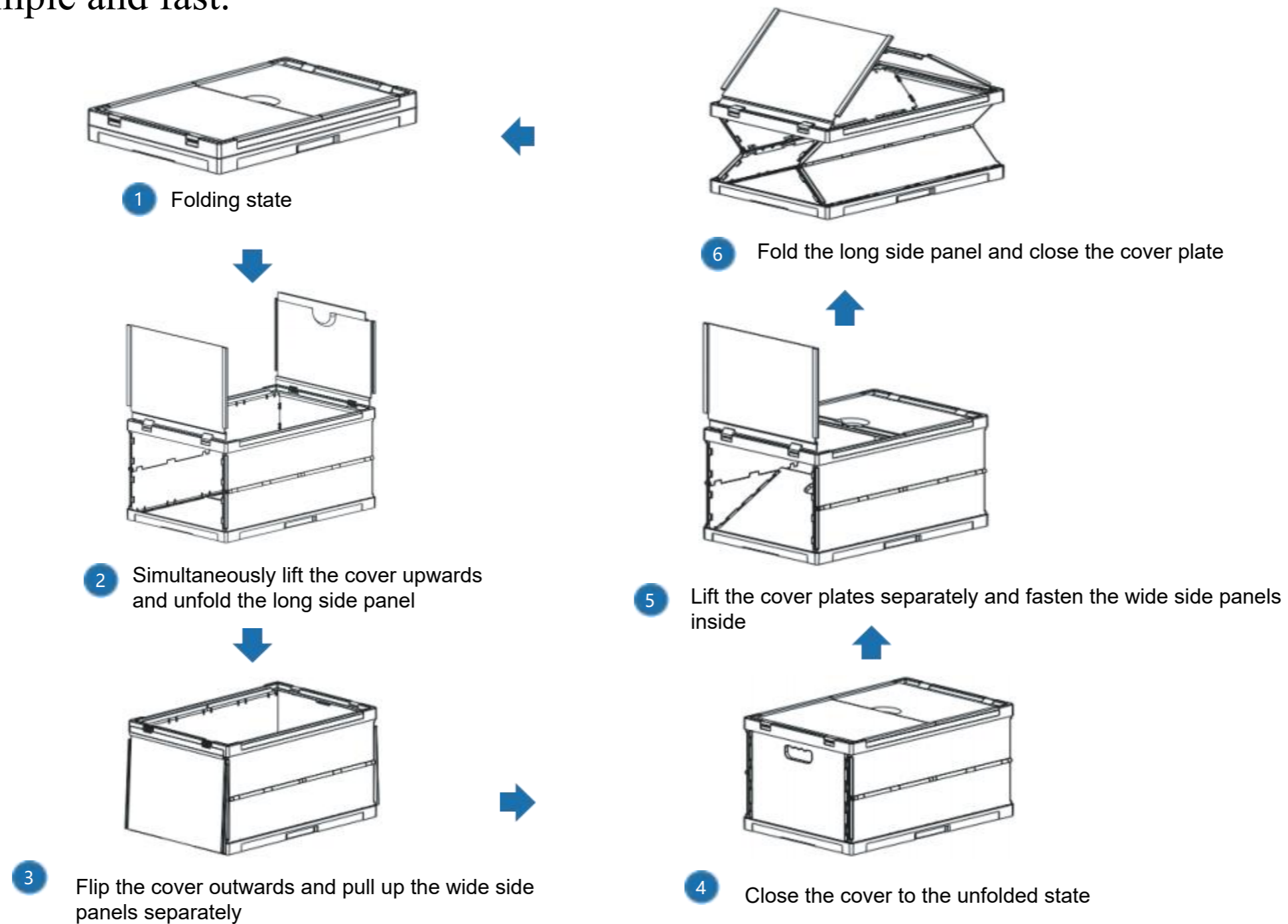


- **Physical image of folding circulation box**



OPERATION STEPS

The box can be folded and unfolded in two states, each requiring only three action steps, which is simple and fast.



PATENT DESIGN



High folding rate, saving about 80% space.



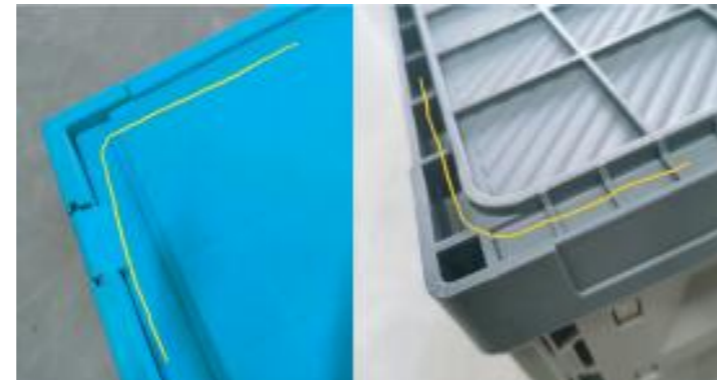
Strong load-bearing capacity, with a vertical load capacity of up to 200Kg.



Hand shaped buckle groove+right angle design, convenient for manual and mechanical handling.



The design of dovetail groove edge clamping and steel bar implantation improves the stability of the entire box.



Design of limiting bars and grooves for the surface and bottom plates. Effectively limit the position and direction of box stacking.



The panel interlocking structure design allows for easy operation of one key locking of the entire box without the need for adhesive tape.

FEATURES



Mechanical lock box

Advantages: Low cost

1. Mechanical sliding button lock+one-time sealing to achieve overall locking and sealing of the box body
2. RFID+QR code digital tag card enables multiple methods to obtain folding box ID identity information

Electronic lock box

Advantages: Intelligence

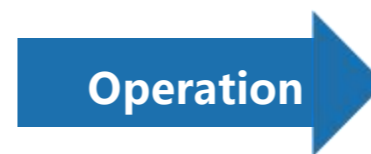
1. Modular structure of the box and electronic lock box: easy to replace damaged parts, reducing the cost of using the recycling box;
2. Integrated electronic lock structure in the electronic lock box: achieving one click locking of the entire box,
Listen to the instructions and eliminate the need for box sealing and packing straps;
3. Electronic lock box integrated with E-ink screen: real-time display of logistics and circulation box Information, achieving electronic waybill functionality;
4. Integrated Bluetooth BLE5.0 and NFC functions in the electronic lock box: multiple mobile devices How to interact with smart boxes for data exchange;
5. The electronic lock box integrates multiple sensors such as temperature, acceleration, Hall, etc Device: Monitor and record the relevant usage status of the circulation box;
6. The manufacturing process of the electronic lock box reaches IP66 level: improving the service life of the lock box and making it easy to clean and maintain the circulation box.



SOFTWARE DISPLAY

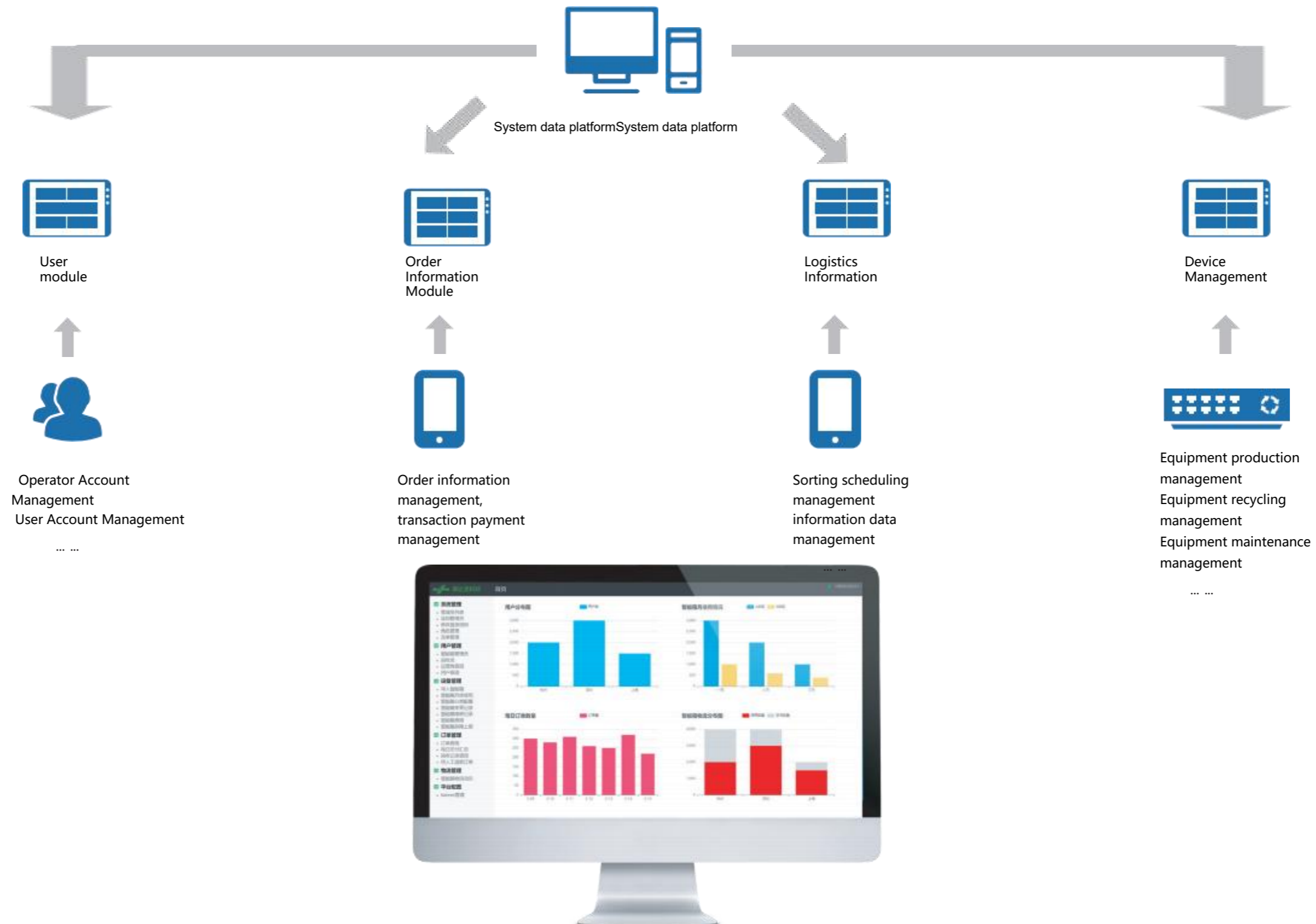


Software homepage interface box interface



Electronic lock payment circulation box software homepage
Mechanical lock payment circulation box software homepage

SERVER-SIDE SOFTWARE



APPLICATION SCENARIO



- Directly replace cardboard boxes for recycling



- Built in insulation bag instead of foam box



- Adding cushioning materials inside instead of wooden boxes



- Directly use instead of ordinary plastic boxes