*Rovinj*

**Dedication, Integrity, Innovation, Win-win**
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**Products**

# RFID Smart Hazardous Chemicals Cabinet Product Specification

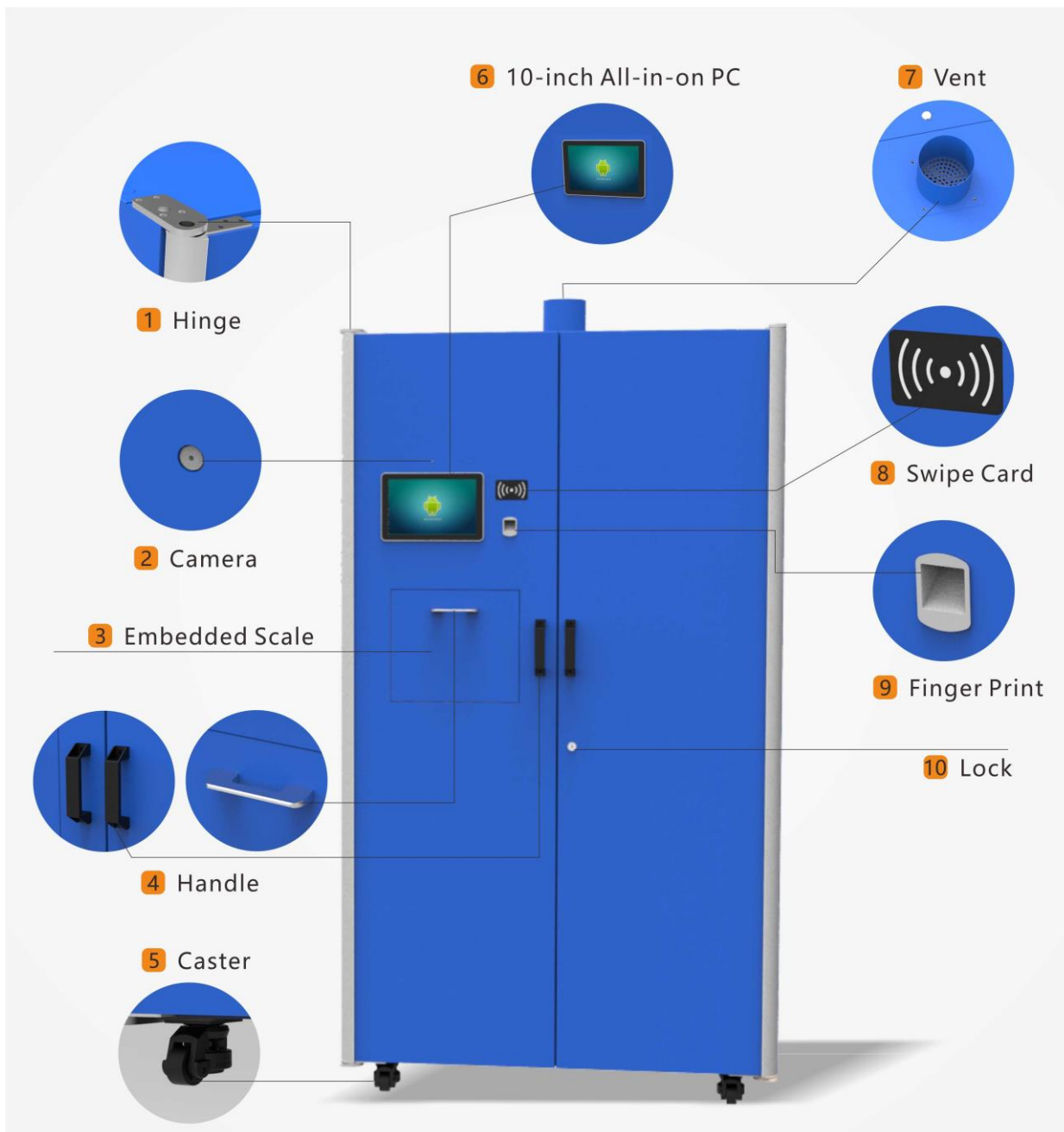## Guangzhou Rovinj Mdt InfoTech Co.,Ltd

## 1. Product Introduction

Rovinj Smart Hazardous Chemicals Cabinet is specially designed for hazardous chemicals management in medical, education, chemistry and other industries. RFID technology effectively solves the shortages of traditional manual management, realizing 24-hour unattended management. User can borrow the chemicals at any time, and the system will automatically record his operation. People without authority cannot get the chemicals from the cabinet, which prevents many irregular operations such as passing off as other person to borrow the chemicals. Administrators can authorize remotely and check the hazardous chemicals status as well as borrower's information in real time. With weighing system, we can also get the information of the chemicals' weight, etc. There are several kinds of sensors integrated in the cabinet to make the whole system run smoothly.

RFID smart hazardous chemicals cabinet integrates various intelligent devices such as RFID reader, RFID antenna, Android all-in-one PC, IC card reader, humiture controller, etc. It can automatically manage the chemincals with RFID tags inside the cabinet. There are also daily/monthly checking and other functions, which can help collect the data of quantity, types and status of chemicals in real time, realizing efficient and intelligent management of chemicals.

**Instruction:** The user unlocks the cabinet by his IC card→ take/put chemicals → close the door to automatically confirm the record. The screen will show the chemicals details, borrowing/returning time and other information.

**Industry Application:** It is mainly used in hazardous chemicals management in medical, education, chemistry and other industries.

**More Usage:** It can also be used as smart medical consumables cabinet, reagent cabinet, tool cabinet, file cabinet, explosion-proof cabinet, safety cabinet, laboratory cabinet, etc. It is customizable, with wide application

**6** 10-inch All-in-on PC

**7** Vent

**1** Hinge

**2** Camera

**3** Embedded Scale

**4** Handle

**5** Caster

**8** Swipe Card

**9** Finger Print

**10** Lock

2. **Hardware Features**

❖ The cabinet is made of 1.2mm double-layer cold-rolled steel sheet, which weighed over 200kg.

❖ The inner is made of corrosion-proof full package PP material, which is certificated by third party appraisal agency.

❖ The cabinet has grounding anti-static measures, strictly in accordance with OSHA standard.

❖ There is a pressure relief opening on both sides of the cabinet.

❖ The air vent is at the top of the cabinet (fan exhaust). It can be connected with VOC sensor to automatically drive the fan to exhaust.

❖ Cabinet Size：1100*620*1900mm, large capacity space.

**3. Product Features**

❖ Informationized: System can check the chemicals in real time, and record the information of each chemicals.

❖ Automated: Greatly simplifies the processes of scanning, inventory, and logging, enabling fast and batch management.

❖ Safe and Controllable：The cabinet is integrated with humiture monitoring system, which will sound an alarm when reaching the limit value, ensuring the safety of hazardous chemicals storage environment.

❖ Weighing System：When the chemical is returned, the cabinet will weigh and compare with the last weight, recording the chemicals consumption. The weighing accuracy is optional.

❖ Multiple Authentications: Supports swiping card, finger print and facial recognition.

❖ Real Time Monitoring: The smart reagent cabinet system can realize 24-hour unattended management of hazardous chemicals. Users can borrow the chemicals after being authorized and the system will automatically generate records.

❖ Open Data：Data can be output in the background system according to the specific requirement, and can be docked with other management system of client's.

### 3. Efficiency

The inventory efficiency is increased by more than 10 times. The original manual inventory costs 5-10 minutes, while the automatic inventory with RFID intelligent management system costs only 3-5 seconds.

### 4. Specification

| Main Specifications | |
|---|---|
| Model | ROV-R516 |
| Overall | |
| Weight | About 200KG |
| Size (width*depth*height) | 1100*620*1900（mm） |
| Enclosure Material | Spray-paint Carbon Steel |
| Trays | |
| Number of Trays | 5（Adjustable） |
| Size(width*depth) | 997*542.9mm |
| Thickness | 10mm |
| Load Bearing of Each Tray | 30KG |
| Power Source | |
| AC Supply Input | 100-240V，50-60 Hz |
| Power Consumption | 12W |
| Operating Environment | |
| Temperature | -20℃～60℃ |
| Humidity | 20%~85%（non-condensation） |
| System | Android 5.1.1 |
| Industrial Computer | RK3288/4 cores Frequency 1.8Ghz |
| Programmable Controller | Domestic |
| Electric Control System | With Domestic PLC |

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Rovinj Technology

| Reader | Domestic (With Imported E710 Chip) |
|---|---|
| Number of Tag Reading | 200+pcs |
| Reading Efficiency | 3~5 seconds |
| Reading Mode | Motionless |
| Screen | 10-inch capacitive screen    1280*800（16:9） |
| RAM | 2G |
| Storage | 8G |
| Communication | TCP/IP、WIFI、4G |
| Shielding Distance | 20~50CM |
| Opening Speed | 1 second |
| Efficiency | Manual |