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## **RFID Smart Hazardous Chemicals Cabinet Product Specification**

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## 1. Product Introduction

ROV-R518D Smart Hazardous Chemicals Cabinet is specially designed for flammable chemicals storage, realizing intelligent, informationized and safe management of hazardous chemicals.

RFID smart hazardous chemicals cabinet integrates various intelligent devices such as RFID reader, RFID antenna, Android all-in-one PC, IC card reader, humidity controller, monitor camera, etc. It can automatically manage the chemicals with RFID tags inside the cabinet.

The cabinet can be unlocked by user card, facial recognition, fingerprint or double locks. After the borrowing/returning operation finished, the system will automatically record the operator's information, chemicals detail, operating time, etc. Administrators can authorize remotely and check the hazardous chemicals status as well as borrower's information in real time. So that we can trace the responsibility for relevant person.

RFID Smart Hazardous Chemicals Cabinet realizes 24-hour unattended management. 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. With weighing system, we can also get the information of the chemicals' weight, etc. 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 safe management of chemicals.

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



## 2. Hardware Features

- ❖ The cabinet is made of 1.2mm double-layer cold-rolled steel sheet, with 38mm insulating layer for both inner and outer sides.
- ❖ 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.
- ❖ The cabinet is equipped with monitor camera, realizing 24-hour unattended management.
- ❖ 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.
- ❖ There is an air vent on both left and right side of the cabinet, which is used for natural ventilation.

## 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, facial recognition or double locks.
- ❖ 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.

## 4. Specification

Main Specifications	
Model	ROV-R518D
Overall	
Weight	About 200KG
Total Size (Width*Depth*Height)	1100*460*1880 (mm) , top depth is 571mm Height with footwheels (optional): 1962mm
Inner Size (Width*Depth*Height)	984*360*1500 (mm)
Enclosure Material	Spray-paint Carbon Steel
Trays	
Number of Trays	4 (Adjustable)
Size (Width*Depth)	964*340mm

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
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