



Dedication, Integrity, Innovation, Win-win
IOT Application Expert

Products



RFID Smart Hazardous Chemicals Cabinet Product Specification

Guangzhou Rovinj Mdt InfoTech Co.,Ltd

1. Product Introduction

ROV-R517D Smart Hazardous Chemicals Cabinet is specially designed for weak corrosive 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-R517D |
| Overall | |
| Weight | About 200KG |
| Total Size (length * width * height) | 1100*460*1850 (mm) , top width is 525mm |
| Inner Size (length * width * height) | 970*350*1500 (mm) |
| Enclosure Material | Spray-paint Carbon Steel |
| Trays | |
| Number of Trays | 4 (Adjustable) |
| Size (Length*Width) | 970*350mm |
| Thickness | 10mm |
| Load Bearing of Each Tray | 30KG |

| Power Source | |
|-------------------------|---|
| Voltage | 220VAC (±10%) 50±3HZ |
| Power | 50W |
| 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 |