Risk & Safety Solutions (RSS) RFID Scanner Instructions

The GAORFID UHF Gen 2 Pistol Grip Reader Writer (SKU#246027) is an enhanced all-in-one UHF RFID reader. The reader is powered by the Android 11 platform and supports 2D QR code and RFID scanning. Product Overview Sheet and User Manual



Scanner and Button Functions



Home Screen and Button Functions

Access the scanner home screen as follows:

- 1. Hit the power button to wake the scanner up.
- 2. Swipe up on the screen.



Settings and App Access

The reader is powered by the Android 11 platform and functions as an Android phone without a SIM card.

1. Settings - Swipe down from the top of the screen two times and tap the settings icon or

click on the **or** icon in the App screen.

- 2. App Screen Swipe up from the bottom of the screen.
- 3. Scan Apps From App Screen open AppCenter.
 - a. Scanners are configured to automatically scan QR codes or RFID tags into RSS upon pushing the scan button or using the scan trigger. The imbedded scan app only needs to be used during chemical inventory reconciliation. Chemical inventories must be tagged with either QR codes or RFID tags, but not a combination of both.
 - b. Open Barcode2D to scan QR codes during inventory reconciliation.

c. Open UHF to scan RFID tags during inventory reconciliation.

Installation of Additional Apps

A Gmail account has been created so that additional apps can be loaded on the scanner if desired.

Email Address: csusehs@gmail.com

Password: SafetyFirst

Scan Troubleshooting

If RFID reader stops adding tag numbers to the cursor placement in RSS check settings in the Keyboardmodulator app as follows:

- 1. Open keyboardmodulator from the App Screen.
- 2. In AppSettings ensure that "Scan content on cursor" is selected.
- 3. Under Data Format ensure that "AutoDetect" is selected for Barcode scans and Hex is selected for RFID scans.
- 4. Perform a test scan in Test.



RSS Resources

To log into RSS:

- 1. Visit https://app.riskandsafety.com
- 2. Login with your Sac State credentials
- 3. Select "Apps"
- 4. Select Chemicals for chemical inventory creation and access.

5. Select WASTe to create hazardous waste labels and manage hazardous waste streams.

RSS Chemicals Resources:

- <u>RSS Chemicals Glossary</u>
- <u>Inventory Roles & Permissions</u>

RSS Chemicals End User Guides:

- Getting Started Guides
 - o <u>Getting Started pdf</u>
 - o <u>Getting Started Video</u>
- Setting Up Your Inventory Guides
 - <u>Setting Up Your Inventory pdf</u>
 - o <u>Setting Up Your Inventory Video</u>
- Adding a Chemical Guides
 - o <u>Adding a Chemical pdf</u>
 - o Adding a Chemical Video
- Importing Inventory into Chemicals Guides
 - o Importing Inventory into Chemicals pdf
 - o <u>Importing Inventory into Chemicals Video</u>
- Sharing Chemicals Guides
 - o <u>Sharing Chemicals pdf</u>
 - o <u>Sharing Chemicals Video</u>
- Inventory Summary Guides
 - o <u>Inventory Summary pdf</u>
 - o Inventory Summary Video
- QR Barcode Reconciliation Guide
 - o <u>QR Barcode Reconciliation Guide</u>
- RFID Reconciliation Guides
 - o <u>RFID Reconciliation pdf</u>
 - o <u>RFID Reconciliation Video</u>

RFID Reconciliation

The RFID reader uses radio waves to wirelessly detect a microchip in the RFID tag. An antenna transmits the reader's signal to the RFID tag and then back to the reader. The reader interprets the data received back from the tag and this data can be exported to Excel for uploading into RSS.

Perform RFID chemical inventory reconciliation as follows:

- 1. Ensure all sublocations have a RFID tag associated with them.
- 2. Open the UHF app in the AppCenter.



- 3. Scan all containers in the room or rooms.
- 4. Transfer the scanned data from the UHF app into Excel.
 - a. Connect the scanner to a laptop via the USB cord.
 - b. Swipe down once from the top of the scanner screen.
 - c. Expand the down arrow to the right of Android System Charging this system via USB.
 - d. Tap on "Tap for more options".
 - e. Select File Transfer under "Use USB For".



5. Open Handheld device from the computer. Handheld will be found under This PC.



- 6. Open Internal Shared Storage.
 - a. If you open Handheld and Internal Shared Storage does not show up then repeat 4 a-e to ensure File Transfer is selected.



7. Open the Handset file folder.

🗐 20250312111757.xls



8. Open the UHF file folder and select the Excel document containing the transferred scan data.



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9. Delete all the data except for the RFID tag numbers (including column titles, first numeric cell above RFID tag numbers, Count and RSSI date). Save file.

	Be	efore					/	After			
	А	в	С	D	E		A	В	С	D	E
1	EPC	TID	USER	COUNT	RSSI	1					
2	3005FB63AC1F3841EC880467			147	-56.90	2					
3	CA0000000000000001AEE20			2	-68.20	3	CA0000000000000001AEE20				
4	CA0000000000000001AEE21			3	-70.50	4	CA0000000000000001AEE21				
5	CA00000000000000001AEE22			2	-53.80	5	CA00000000000000001AEE22				
6	CA00000000000000001AEE23			2	-55.20	6	CA00000000000000001AEE23				
7	CA00000000000000001AEE24			2	-52.40	7	CA00000000000000001AEE24				
8	CA00000000000000001AEE25			4	-58.70	8	CA00000000000000001AEE25				
9	CA00000000000000001AEE26			5	-61.90	9	CA00000000000000001AEE26				
10	CA00000000000000001AEE27			5	-40.40	1	CA00000000000000001AEE27				
11	CA00000000000000001AEE28			5	-47.10	1	1 CA00000000000000001AEE28				
12	CA00000000000000001AEE29			4	-60.10	1	2 CA00000000000000001AEE29				
13	CA00000000000000001AEE2A			2	-58.10	1	3 CA00000000000000001AEE2A				
14	CA00000000000000001AEE2B			2	-53.80	14	4 CA00000000000000001AEE2B				
15	CA00000000000000001AEE2C			2	-70.40	1	5 CA00000000000000001AEE2C				
16						4					

10. In the RSS Chemicals app click on Inventory Summary then Reconcile Your Inventory.

Welcome!	
Janee Hardman 🛛 🔫	
EH&S Test Group	
	Import & Reconcile
What would you like to do?	Reconcile your inventory
	Reconsile your inventory by sublocation (barcode only)
Q Search Chemicals	⊻ import
+ Add to Inventory	EXPORT INVENTORY
	Export may take several minutes.
→← Share Chemicals	
→ Pending Transfers	
Inventory Summary	

11. Select the rooms that the scan included.

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Rooms in scan
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12. Select Upload Scan or drag and drop the Excel document into the area.



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- a. RSS will parse your inventory and compare it to the tags that were scanned. The results will include:
 - i. Location Match RFID tags found in the expected location.
 - ii. Location Mismatch RFID tags scanned in different location than expected, usually a different room than selected in the scan.
 - iii. Unscanned Missing RFID tags were expected to be scanned in the sublocations, usually because chemical was wasted out but not taken.
 - iv. New New RFID tags not associated with a current inventory item, usually because chemical was tagged but not added to the RSS online inventory.
 - v. Accounted For RFID tags not relevant to the reconciliation of the inventory, usually tags from another inventory found mixed in with your own.

Reconciliation S	ummary
Location Match - 2 cc	ontainers
RFID tags found in	expected location.
Location Mismatch -	0 container
RFID tags scanned	in different location than expected.
Unscanned - 0 contai	ner
RFID tags not scar	nned.
New - 0 container	
New RFID tags not	associated with a current inventory item.
Accounted For - 1 cor	itainer
RFID tags not relev	vant to the reconciliation of this inventory.

Once you finish uploading, you will not be able to add any more RFID tags to this reconciliation.

FINISH UPLOADING

13. Click Finish Uploading then download the reconciliation report.

Leconciliation Report

- 14. Take action: Use the reconciliation report to find container(s) that need to be reconciled (e.g., location mismatches, unscanned tags, new tags, accounted for tags).
- 15. When all actions have been completed select Finish Reconciliation.

Please download the report before finishing reconciliation.

FINISH RECONCILIATION