## UHF RFID Gun powered by Zebra Quick Start and Regulatory Guide

QSG 230135 A00





| Non-Contractual Picture |

20 Roe Georges Claude - 21 Les Milles 12290 Als-an-Provence FRANCE 1. +33 (0)4 42 65 25 65 E +38 (0)4 42 51 57 82

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# RFD40 RFID Standard Sled



## **Quick Start Guide**

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For the latest version of this guide, localized translations, and related product guides, visit the Zebra website at: zebra.com/support.

## **Getting Started**

The RFD40 UHF RFID Standard sled provides RAIN Radio Frequency Identification (RFID) tag reading, writing, and locating capability to supported Zebra mobile computers and other host devices.

To use the RFD40 sled for the first time with a mobile computer:

- 1. Insert the battery into the device.
- 2. Charge the RFD40 sled using the charging cradle, charging cup, or USB-C cable.
- 3. Replace the standard cover with the adaptor that is specific to the mobile computer to be used with the sled.
- 4. Place the mobile computer into the adaptor headfirst.
- 5. Secure the mobile computer into the adaptor by pressing down on the bottom of the mobile computer.
- 6. Set the region using 123RFID Desktop or 123RFID Mobile.

For the latest versions of guides and software, go to: zebra.com/support.

For detailed information, refer to the Product Reference Guide at: zebra.com/support.

## **Adaptor Installation**

To install the adaptor,

- 1. Remove the cover by pulling up on the lip.
- 2. Secure the adaptor onto the RFD40 by fastening the four coin screws into the sled.
- Figure 1 Adaptor Installation





## **RFD40 RFID Standard Sled Features**





#### Table 1Features

Number	Item
1	Adaptor (Sold Seperately)
2	Coin Screws (4)
3	Adaptor Label
4	eConnexTM Communication Port
5	Battery Status LED
6	Decode LED
7	Tri-Function Trigger
8	Charging Contact and USB-C Port
9	Tethering Point for Handstrap
10	Rubber Foot

## **Device Installation**

## Installing the Mobile Computer into the RFD40 Sled

To secure the mobile computer to the RFD40 sled, place the top of the device fully forward into the RFD40 sled adaptor and push down on the bottom of the mobile computer to secure it.



**NOTE** Depending on the mobile computer being used with the sled, the mobile computer may be inserted into the adaptor tail-end first.



**NOTE** While installing the mobile computer into the adaptor, use caution and do not to collide the pogo pins on the RFD40.



## Removing the Mobile Computer from the RFD40 Sled

To remove the mobile computer from the RFD40 sled, firmly hold the sled handle, and lift the device off of the sled adaptor.



## **Battery LED Definitions**

The RFD40 RFID sled uses a three-color LED to indicate status. The table below displays the battery LED state while the device is charging.

Table 2 RFD40 LED Definitions While Charging

Condition	LED Status
Charging	Amber (Blinking)
Charge Complete	Solid Green
Charging Error	Amber (Fast Blinking)
Charging (Battery end of life)	Red (Blinking)
Charge Complete (Battery end of life)	Solid Red
Charging Error (Battery end of life)	Red (Fast Blinking)

## **Decode LED Definitions**

The table below displays the decode LED indications.

#### Table 3

Scan	LED Status		
Good Scan	Green		
Scan Error	Red		
RFID Tag Read Indicator Enabled	Green		
Read Error	Red		

## **RFID Sled Battery Replacement**

## **Battery Installation**

To install the battery:

- 1. Align the battery with the notch facing the back of the device.
- 2. Slide the battery into the handle of the device.
- 3. Snap the battery into place.



## **Battery Removal**

To remove the battery, pinch the clips to unlock the battery and slide downwards to release.



## Charging

Before using the RFD40 for the first time, fully charge the battery by placing it in the charging cradle until the LED Power/Charging Indicator turns solid green. The RFD40 RFID sled and mobile computer may be charged in the charging cradle individually or attached together.

When an RFD40 RFID sled is removed from a charging cradle, it is automatically powered on. If a reader is not used for a duration of thirty minutes, the reader enters Off mode.

Figure 2 Single-Slot Charging Cradle



## **Optimum Tag Decoding**



## **Ergonomic Best Practices**



**NOTE** Taking breaks and task rotation is recommended.

Optimum Upright Body Posture



Optimum Body Posture for Low Scanning



#### Optimum Body Posture for High Scanning





## Avoid Extreme Wrist Angles



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# **123RFID Mobile**

This section describes the 123RFID Mobile Application which demonstrates the RFD40 RFID Standard sled's capability and tag operation functionality.

## Requirements

Requirements for the 123RFID Mobile Application for Android are as follows:

- · Zebra approved mobile computer compatible with the RFD40 Standard RFID sled.
- 123RFID Mobile Application APK.

## Installing 123RFID Mobile

Install the 123RFID Mobile Application on the mobile computer from zebra.com/support or from the Google Play Store. The procedure to install the software on an Android device is dependent upon the Android version.

To install the software:

- Connect the Android device to your computer. It is connected as MTP Device and shown as a drive on the computer. For information on transferring files using Media Transfer Protocol, refer to the Mobile Computer Integrator Guide at: zebra.com/support.
- Navigate to Device Settings > Security and check Unknown Sources to allow installation of applications from unknown sources.
- **3.** Copy the 123RFID\_Mobile\_1.0.x.x.apk file to the mobile device.
- 4. Go to Settings > Security and select Unknown sources.
- Use the File Manager to locate the 123RFID\_Mobile\_1.0.x.x.apk file in the folder to which it is copied in Step 3 and select it.
- 6. In the pop-up window, select the Android App installer to begin installation.

## **Using 123RFID Mobile**

To use the application for RFID operations:

- 1. Launch the 123RFID Mobile Application for Android on the mobile device.
- 2. From the Readers list, tap on the available RFD40 device listed under Available Readers to connect and view the Rapid Read screen.
- Tap Settings > RFID > Advanced Reader Options > Antenna. Power Level is set to 27.0 dBm by default. However, it is shown as 270 dbm because the value used is in units of tens of dBm. Japan units are set to a different default power level depending on the SKU type.

4. Tap the Back button and select Regulatory to set the region in which the device is operating.

## **Readers List**

From the bottom navigation menu tap the **Readers icon**.





Tap a reader name from the **Readers List** to establish a session with the selected reader. Tap again to terminate the session. To obtain additional information about the device, tap **Reader Details**.

#### Figure 5 Reader Details





#### **Updating the Device Firmware**

Update the device firmware by tapping Firmware Update from the menu. Next, select the firmware version to be loaded onto the device and tap the Update Firmware button.





## **Rapid Read**

Tap Rapid Read from the Home or Menu screen.



The Rapid Read and Inventory screens display the following data (see Inventory on page 19).

- Total Reads
- Unique tag count
- Read time (mm:ss)
- Tag read rate (tags/sec).

The Rapid Read and Inventory screens present two different views of the inventory operation on the reader. The **Start/Stop** functionality can be used interchangeably on both screens. For example, when operation starts on the **Rapid Read** screen and you navigate to the **Inventory** screen, the button available on the **Inventory** screen is **Stop**. The same is true when the operation starts on the **Inventory** screen. During the rapid read process, you can navigate to the **Inventory** screen to view tag details along with tag counts for each tag. The statistics displayed are maintained on the **Rapid Read** and **Inventory** screens regardless of the screen used to start the process.

Select **Start** to start the rapid read inventory operation. Select **Stop** to stop inventory operation.



**NOTE** The scan trigger on the device can also start and stop the inventory operation. Press the trigger to start, continue to hold and release to stop.

Progressing to another screen does not halt the operation. However, attempting to make changes or perform another operation while rapid read is in process results in an error.

#### Inventory

Once tags begin reading, the tag details populate the inventory screen. To filter the information by type, tap the Memory Bank dropdown menu and select User, Reserved, TID, or EPC.

Select Inventory from the Home or Menu screen.

		=	
None - 11	261	None 11	261
Q,		Reserved	
TAQ	Count IIISSI	TID	Court RSSI
000000000000000000000000000000000000000	1 -60	12500000026 EPC	1 60
0000000000012500000029	34 -52	vuuuuuuuuuuuuu12500000029	34 -52
0000000000012500000032	35 -56	0000000000012500000032	35 -56
00000000000012500000031	34 -56	00000000000012500000031	24 -56
000000000000000000000000000000000000000	34 -56	00000000000012500000024	34 -56
00000000000012500000030	35 -53	0000000000012500000030	35 -53
00000000000012500000033	35 -51	00000000000012500000033	35 -51
00000000000012500000028	17 -61	00000000000012500000028	17 -61
000000000000012500000027	22 -51	0000000000012500000027	22 61
000000000004974305211859	13 -63	000000000004974305211859	13 -63
0000000000000125000	1 -63	000000000000125000	1 -63
= 0	0	= 0	٥

Figure 8 Inventory Screen

Memory

Tag reading is started and stopped on this screen as well as on the **Rapid Read** screen (see Rapid Read on page 18). When the process starts, tag information displays on the screen.

Tap **Start** to start the rapid read inventory operation. The **Start** button changes to **Stop**. Tap **Stop** to stop the read inventory operation.



**NOTE** The scan trigger on the device can also start and stop the inventory operation. Press the trigger to start, continue to hold and release to stop.

The tag ID selected can be filtered by **RFID Settings**, **Locate**, **Pre Filters**, **and Tag Write**. After selecting a tag, tap on the action bar **Locate** icon to go to the Locate screen. Tags are fully convertible to ASCII format. ASCII mode may be enabled by selecting **Settings > Application Settings**.

#### Figure 9 Tag Data Filters

	RFID SetUrgs Locato Pie Filters
q	Tog Witte
tat	Said 1955
00000000000012500000028 **** #0	1 60
0000000000012500000029	34 -52
00000000000012500000032	35 .56
00000000000012500000001	34 -55
00000000000012500000024	34 -56
000000000000012500000030	35 -53
00000000000012500000033	35 61
00000000000012500000028	17 -61
0080800000001250080827	22 -61
0000000000049743052	13 -63
0000000000012500000	1 :63
ander ACO	Ç Settega

## Locate Tag

Tap Locate Tag from the Home or Menu screen.

#### Figure 10 Locate Tag Screen



On this screen, enter the Tag ID in the text area or select a tag from the Inventory screen to pre-populate the Tag ID to search.

Tap **Start** to start the locate tag operation and tap **Stop** to stop. The device trigger can also be used to start and stop the operation.



**NOTE** The scan trigger on the device can also start and stop the inventory operation. Press the trigger to start, continue to hold and release to stop.

The color bar on the display shows the relative distance of the tag.

When the locate tag operation starts, moving to another screen does not stop the operation until **Stop** is selected.

#### Multi Tag

To locate and track multiple tags, select the Add a File icon on the multi-tag panel and select the file containing the specific tag information from the file manager to bring the file into the application.

#### Figure 11 Multi Tag File Upload



## **Inventory Screen Features**

ltem	Description				
Action Bar					
Tags	Tap <b>Memory Bank</b> to select one of the following memory bank options from the drop-down menu:				
	None - Defaults to EPC.				
	User - Allows reading user memory bank data when the tag is inventoried.				
	Reserved - Allows reading reserved memory bank data when the tag is inventoried.				
	<ul> <li>EPC - Allows reading EPC memory bank data when the tag is inventoried.</li> <li>EPC - Allows reading EPC memory bank data when the tag is inventoried. When the next inventory operation starts, the details from the selected memory bank displays. This menu is inactive if there is an ongoing operation on the connected reader.</li> </ul>				
	Default Display - None.				
Search	Tap the <b>Search</b> icon and enter a tag ID. Tags that match the entry display in the content area.				
Power Management	Icon indicates if Dynamic Power is on. See Power Management on page 41. Tap the <b>Power Management</b> icon to open the Battery Status screen.				
Content Area (select a tag)	Tapping a <b>Tag ID</b> highlights the tag. The highlighted Tag ID is populated on the Tag Location text area as well as the Tag Pattern area in the Access Control screen. Tap <b>Start</b> to start searching for the tag. See Tag List Match Mode Operation on page 24 for more details. From this screen, return to the <b>Menu</b> or go to the <b>Home</b> screen and select <b>Locate Tag</b> .				
Content Area (select a tag)	The tags displayed in this area are based on the option selected from the memory bank. Tap the tag ID to expand details about the tag. Tap the tag ID again to collapse details.				
	Example Default Tag Display:				
	Tag IDTag Count				
	AD99 15404190725965400404				
	Example Expanded Tag Display:				
	<b>Note:</b> Expanded tag detail can only display when the inventory operation is stopped. Memory bank data is shown only when inventory is complete.				
	Tag IDTag Count				
	AD99 15404190725965400404				
	EPC MEMORY3000				
	RSSI				
	-50 Dhase				
	1900				
	USER				
	1122334455667788AABBCCDDEEFF				
	1122334455667788AABBCCDDEEFF				
	1122334455667788AABBCCDDEEFF				

#### Table 6 Inventory Screen Features

#### **Tag List Match Mode Operation**

When **Tag List Match Mode** is checked on the **Application** screen (Application Settings on page 43), the application identifies tags from a given set of tags in csv tag list format (comma separated values file). The contents of the csv file display on the **Inventory** screen. By default, the application displays friendly names from csv files.

Before the inventory starts, the count is zero. The tag list can be sorted using the drop-down menu choices. Select an option to display the type of tags to show when the inventory starts.

All: Sample 4 Inventory List: Tag List Enabled; All Tag Option Selected on page 28

Matching: See Sample 1 Inventory List: Tag List Enabled; Matching Tag Option Selected on page 24.

Missing: See Sample 2 Inventory List: Tag List Enabled; Missed Tag Option Selected on page 26.

Unknown: Sample 3 Inventory List: Tag List Enabled; Unknown Tag Option Selected on page 27

#### Sample Contents of Taglist.csv File

The csv file should contain only alphanumeric characters in the tag column. If there are any special characters, the row is discarded.

The Taglist.csv file must be located inside the rfid folder which must be manually created at the Android device root directory.



**NOTE** The folder name must be all lower case (for example, rfid and not RFID).

Figure 12 Taglist.csv File Content	ts
------------------------------------	----

A	1 🔹 i 🖂 🧳 j	\$ 30304035A880C800	00123658	
1	A	В	С	D
1	30304035A880C80000123658	Item (*-*).001		
2	3035200EDC27074000123663	Item (*-*).002		
3	8DF000000000000081291D	Item (*-*).003		
4	30304035A880C8000012364F	Item (*-*).004		
5	30304035A880C80000123644	Item (*-*).005		
6	30304035A880C8000012365C	Item (*-*).006		
7	30304035A880C80000123654	Item (*-*).007		
8	30304035A880C80000123710	Item (*-*).008		
9	30304035A880C80000123645	Item (*-*).009		

#### Sample 1 Inventory List: Tag List Enabled; Matching Tag Option Selected

When inventory starts, the application only displays the tag reads that match the tags in the taglist.csv file. Matching tags display in green. Select any tag read to show the matching tag details in the csv file.



#### Figure 13 Matching Taglist.csv File Contents

#### Sample 2 Inventory List: Tag List Enabled; Missed Tag Option Selected

When inventory starts, the application only displays the tag reads that are missed and included in the taglist.csv file. Missed tags display in red. Select any tag to show the missed tag details in the csv file.

#### 735 PM 🗢 📥 👁 0.5 137 PM 0 A 0 **1** 87 REDXX REDXX Service of the servic 18. 10000 Manang. 0 7 Manager, 0 7 10.00 Rough: ALC: NO TO:N Dours. 101010-0 Hwn(\*\*\*) 001 Ð, Hair(\*\*\*) 003 D, fuel to D Lader: D) STATES. 00304095A880C8000017380F D, 30304085A880C8000012380C Harris \*1094 В. 10304015A880C8000017388F Ð. 0 Here?- 51084 Wy Tag. Φ. Sam. a. We Take D. 10 Balance 14 30304035A560C8000023A081 ATART . 22 **START** 1.000

Figure 14 Missed Taglist.csv File Contents

#### Sample 3 Inventory List: Tag List Enabled; Unknown Tag Option Selected

When inventory starts, the application only displays tags that were read but not included in the taglist.csv file. Unknown tags display in gray. Select any tag to show the unknown tag details.

		22000 0 A 0	
	and the		
· 2	2	oossi * 2	2
342	GAVE REEK	1041.	Out Hits
KERET170000000000414248	2 -54	£2801170000000000A414328	2 -54
E2006013000000234076879	1 -51	And the owner of the	1 41
X2864010000000004010861	1 34	and nover	
FERFERI STOCOCOUSED/ERAB	1 -29	EIRORAT MODERATION (	1. 14
0000001555202000011220400	1 50	All and the second s	9 (28
30883343059941-00000000	12 -65	srásovi	
Electron and an and an and an and an		00004015408951000015440	
Emerge Lines		SUBSCIEDED OF ATANT	

#### Figure 15 Unknown Tags

#### Sample 4 Inventory List: Tag List Enabled; All Tag Option Selected

When inventory starts, the application displays the tags for all of the options:

- Tag reads that match the tags in the taglist.csv file. Matching tags display in green. Select any tag read to show the matching tag details in the csv file.
- Tag reads that are missed and included in the taglist.csv file. Missed tags display in red. Select any tag to show the missed tag details in the csv file.
- Tags that were read but not included in the taglist.csv file. Unknown tags display in gray. Select any tag to show the unknown tag details.

Figure 16 A	II Tags
-------------	---------

732PU 0 & @	0.5	Jashu & A Ø	0.8
= RFDXX	1 £	= REDXX	1 E
·····	2	** * 2	2
TAG	Sever, #5N	132	1045 BBD
water	1 -55		F 45
teat.	1 -55	6445425241644543486282446	
ttern	đ	tig)	1 -55
30304035488000000013461	a	Film	0
8280601200000000024076997	1 -40	30304035A89000000123A85	
E10060439000000340703887	1 -36	3000403545010399901725401	<b>q</b>
		Element vie de la construction d	-1
Elent viteren		LINGED TETRO CONTRACT	🕐 as

#### Sample 5 Tag List Matching Selected; Show Friendly Not Names Selected

When inventory starts, the application displays the tags for selected options from All, Matching, Missing, or Unknown. Application shows friendly names (i.e., Tag details instead of EPC) on screen.

#### Figure 17 Show Friendly Names Enabled



#### Sample 6 Exporting Data - Tag List Matching Selected

The Application Settings screen on page 43 has the option to Export Data. If the option is checked, data is exported when the inventory stops. The tag content area is exportable to a file. For example, when **Matching** is selected from the menu to display only matching tags in the tag content area, the matching data can be exported to a file. The exported csv file includes the matching, missing, and unknown tag count shown in Figure 18.

#### Figure 18 Exported File Content

A	A1 ▼ : × ✓ f <sub>x</sub>		$f_{x}$	NVENTORY SUMMARY			
		А				В	с
1	INVENTORY SU	лмма	RY				
2	MATCH COUNT	T:				36	
3	MISS COUNT:					36	
4	UNKNOWN CO	DUNT:				36	
5	READ TIME:					0:00:11	
6							
7	TAG ID				C	OUNT	
8	30304035A880	C8000	0123	658		0	null
9	3035200EDC27	07400	0123	663		13	MATCH
10	8DF00000000	00000	0812	91D		0	MISS
11	30304035A880	C8000	0123	644		18	MATCH
12	30304035A880	C8000	0123	65C		82	MATCH
13	30304035A880	C8000	0123	654		0	null
14	30304035A880	C8000	0123	710		7	MATCH
15	30304035A880	C8000	0123	645		1	MATCH
16	30304035A880	C8000	0123	656		0	null
17	303425485C270	074000	01230	562		476	MATCH
18	30304035A880	C8000	0123	64D		0	MISS
19	30304035A880	C8000	0123	650		0	MISS
20	8DF00000000	00000	07CC	CC7		0	MISS
21	30304035A880	C8000	0123	705		0	MISS
22	30304035A880	C8000	0123	737		3	MATCH
23	30304035A880	C8000	0123	70F		28	MATCH
24	30304035A880	C8000	0123	71D		27	MATCH
25	30304035A880	C8000	0123	721		8	MATCH
26	30304035A880	C8000	0123	736		0	null
27	AD99160042DE	321905	64000	00C6		0	MISS
28	8DF00000000	00000	0812	998		0	MISS
29	30304035A880	C8000	0123	64C		0	MISS
30	30304035A880	C8000	0123	652		0	null
31	30304035A880	C8000	0123	664		532	MATCH
32	30304035A880	C8000	0123	64E		0	MISS
33	30304035A880	C8000	0123	64A		0	MISS
34	30304035A880	C8000	0123	657		0	null

#### **Unique Tag Reporting**

When **Unique Tag Reporting** is enabled on the Tag Reporting screen on page 39, the reader reports only unique tags based on the options below.

- When the Matching option is selected (see Sample 1 Inventory List: Tag List Enabled; Matching Tag Option Selected on page 24) the tag count cannot be greater than one because the unique tags are only reported one time.
- When the **Matching** option is not selected, the list displays unique and total reads. The tag count cannot be greater than one because the unique tags are only reported one time.

### **Settings**

To access the Settings of the device, tap the Settings Icon from the bottom navigation bar. Settings is split up into General Settings to configure settings on the device, RFID Settings to configure specific reader and antenna settings, and Application settings to make changes to the 123RFID Mobile application settings.

#### **General Settings**



 Table 7
 General Settings Screen Options

Settings Option	Description		
Firmware Update	Update the firmware on the reader.		
Factory Reset	Reset the settings on the reader to Factory Defaults.		
Enable Logging	Enable the logging of tag reads.		
Device Info	View information such as friendly name, serial number, model, and		
	RFID/scan settings.		
Share File	Share a file with a paired device.		
Trigger Mapping	Designate the Upper Trigger for RFID decode and the Lower Trigger for Host Scan or the Upper Trigger for Host Scan and t Lower Trigger for RFID decode.		

#### Updating the Device Firmware

Update the device firmware by tapping **Firmware Update** from the menu. Next, select the firmware version to be loaded onto the device and tap the Update Firmware button.

#### Figure 20 Firmware Update

RF L				
÷	Updat	te Firm	ware	1
SAA	FKS00-001	-N34D0.8	CDAT	
SAA	FKS00-001	-N40D0.I	DAT	
SAA	FKS00-001	-N33D0.	FCDAT	
PAA	FKS00-002	-d36D0.0	DAT	
From To: S	CAAFKS00-0	001-N40	FCDAT	
				_

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## **RFID Settings**





#### Table 8

RFID Settings Option	Description
Profiles	Displays Fastest Read, Cycle Count, Dense Readers, Optimal Battery, Balanced Performance, User Defined and Reader Defined profiles.
Advanced Reader Settings	Antenna, Singulation, Control, Start/Stop Triggers, Tag Reporting, Power Management and Save Configuration
Regulatory	Allows region and channel selections.
Battery	Displays the device battery status.
Beeper	Use to turn the beeper on/off, and set volume.
LED	Enables/Disables the device tag read LED indicator.

#### **Profiles**

To display the list of profiles, tap **Settings > Profile**.

- The currently selected profile is highlighted in orange.
- Tap profile item to expand the profile and view applicable configurations.
- Profiles can be selected or disabled by using the slider switch to the right of the profile name.



**NOTE** If Power Level, Link Profile, Session, or Dynamic Power are modified from each respective screen, then the currently selected profile changes to User Defined profile and profile item values are modified with same values.

Profile setting options are as follows:

- Fastest Read Read as many tags as fast as possible.
- Cycle Count Read as many unique tags as possible.
- Dense Readers Use when there are multiple readers within close proximity.
- Optimal Battery Provides best battery life.
- Balanced Performance Maintains balance between performance and battery life.

- User Defined Custom profile used for custom requirements.
- Reader Defined Maintains reader configurations.

#### Figure 22 Profiles Settings

← Profiles	← Profiles	← Profiles
Fastent Read	Fastent Read	Fastest Read
Cycle Count	Read as many tags as fast as possible	Cycle Count
Dense Readers	Power Level (dbm) Link Profile	Read as many unique tags possible
Optimal Battery	Session (50 -	Power Level (dbm)
Balanced Performance	Dynamic power	Session II T
User Defined	Cycle Count	Dynamic power
Reader Defined	Dense Readers	Dense Readers
N ∎ 11:50 AM	Optimal Battery	Optimal Battery N ■ 12:00 PM ← Profiles
Fastent Reed	Dense Readers	Dense Readers
Cycle Count	Optimal Battery	Optimal Battery
Dense Readers	Gives best battery life	Balanced Performance
Use when multiple readers in close provinity	Power Level (dbm) Link Profile	Muintains balance between performance and battery life
Power Level (dbm)	Session 10 -	Power Level (dbm)
Link Profée	Dynamic power	Link Profile Without
Dynamic power	Balanced Performance	Session 82 -
Optimal Battery	User Defined	User Defined

< Profiles			<ul> <li>Profiles</li> </ul>		
Optimal Battery			Balanced Performa	nce	
Balanced Performa	ince		Lines Defined	37	
Liser Defined		1.00	User Denneu		
User Denned			Reader Defined		126
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link Profile	FM0 640K	at .	Power Level (dbm)		
Session	SD		Link Profile	75522-010	
Dynamic power			Session	işar	
Reader Defined			Dynamic power		

#### **Advanced Reader Settings**

#### Antenna

To access the Antenna screen, go to: **Settings > Advanced Reader Options > Antenna**. The Antenna screen displays the following:

• **Power Level** - Displays the current selection and a text box for available power levels (as reported by the device). The default setting is 27.0 dBm (shown as 270; the value displayed is in units of tens of dBm). Japan units are set to a different default power level depending on the SKU type.

The minimum power level when DPO is enabled is 3.1 dBm. When DPO is disabled, the minimum power level is 0 dBm.

• Link Profile - Displays the current selection and includes a drop-down list of available link profiles (reported by the device).

Link Profile display format is as follows: Return link bit data rate in bis per second (e.g., 60000 -> 60 Kbs); Miller Value (e.g., MV\_4 -> Miller 4); thus profile name M4 240K (240K becomes BLF) modulation type (PR ASK is the only one supported).

- PIE value has no units and is either 1500 and 2000 minimum.
- Tari applicable Tari value in thousands of micro seconds (e.g., 6250 -> 6.25 microseconds).

#### Figure 23 Antenna Screen

← Antenna			← Antenna	Î.	
Power Level (dbm)	300	L	Power Level (dbm)	FM0 640K	1
Link Profile	FM0 640K	۰.	Link Profile	M2 240K	
PIE	1500	1	PIE	M2 256K	•
Tari	6250	1	Tari	M2 320K	
				M4 256K	
				M4 320K	
				AUTOMAC 668	I
				FM0 320K	



NOTE The Power Level and Link Profile are blank when there is no connection to the reader.

#### **Singulation Control**

To access Singulation Control, go to: **Settings > Advanced Reader Options > Singulation Control**. View or configure the singulation control settings for each antenna.

- Session The drop-down list includes the available session options (S0, S1, S2, S3).
- **Tag Population** A numeric value of the estimated number of tags in the Field of View (FOV). Values shown are 30, 100, 200, 300, 400, 500, 600.
- Inventory State State A, State B, AB Flip.
- SL flag ALL, DEASSERTED, ASSERTED.

#### Figure 24 Singulation Control Screen



#### **Start and Stop Triggers**

To access the Start and Stop Triggers screen, go to: **Settings > Advanced Reader Options > Start\Stop Triggers**.

The Start Trigger Periodic displays the Period input box (in milliseconds).

The **Stop Trigger Duration**, **Tag Observation** and **N attempts** display numeric value input boxes. All time entries are in milliseconds.

All the required details for saving triggers to the reader must be entered or the application does not save the trigger settings to the reader.

Figure 25 Start and Stop Triggers Screen



Required input for Start/Stop Trigger settings are as follows:

- Start Trigger
  - Immediate (default)
  - Hand-held Select either the Trigger Pressed or Trigger Released check box.
  - Periodic Enter the period of time in milliseconds.
- Stop Trigger
  - Immediate (default)
  - Hand-held Select either the Trigger Pressed or Trigger Released check box along with Timeout in milliseconds.
  - **Duration** Enter duration in milliseconds.
  - Tag Observation Enter the tag count along with timeout in milliseconds.
  - **N Attempts** Enter the number of attempts along with timeout in milliseconds.

If the start trigger type is set to Hand-held trigger (pressed or released), the application sets the repeat for the operation to ensure the use case if repeated operations can be demonstrated.

If any trigger is defined as Hand-held, the application does not act on immediate trigger type for a Hand-held trigger action.

#### **Tag Reporting**

To access Tag Reporting, go to: **Settings > Advanced Reader Options > Tag Reporting**.

#### Figure 26 Tag Reporting Screen

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 Table 9
 Tag Reporting Screen Options

Option	Description
PC	Select to allow reporting the PC as part of the Tag Data.
RSSI	Selection indicates whether or not the RSSI (Received Signal Strength Indication) is reported as part of the Tag Data.
Phase	Select to indicate whether or not the Phase is reported as part of the Tag Data.
Channel Index	Select to indicate whether or not the Regulatory Channel Index is reported as part of the Tag Data.
Tag Seen Count	Select to indicate whether or not the Tag Seen Count is reported as part of the Tag Data.
Report Unique Tags	When this option is enabled, the reader reports only unique tag reads. The Unique Tag reporting feature can be enabled when using Tag List Match mode.

#### **Power Management**

This screen provides an option to enable **Dynamic Power Optimization (DPO)** in the reader. Enabling DPO enhances battery life during inventory operations.



**NOTE DPO** is enabled by default. It is not necessary to disable DPO when executing access operations or using filters because DPO is automatically disabled and when the operation is complete, it is automatically enabled.

If **Dynamic Power** is On, a green battery icon appears in the title bar of the application. Tapping on this opens the **Battery Status** screen.

To access Power Management, go to: Settings > Advanced Reader Options > Power Management.

Figure 27 Power Management Screen

÷	Power Mana	gement
Dynam	ic power	

Dynamic Power optimization configures the reader for best battery life and works with Pre configured settings. Dynamic Power optimization works only for inventory operation

#### **Save Configuration**

To access Save Configuration, go to: **Settings > Advanced Reader Options > Save Configuration**. This screen is used to save the settings and displays the current settings on the device.

The settings are saved on the device until a reset to factory defaults is performed on the unit (see Settings on page 31).

The Tag Pattern area is automatically filled in when a tag is selected in the Inventory screen.





#### **Access Control**

Figure 29 Access Control Screens - Read/Write, Lock, Kill

-
-

The Tag Pattern area is automatically filled in when a tag is selected in the Inventory screen.

#### **Read/Write**

The Read/Write access operation is simplified with offset and length fields are hidden. The user can tap the more/advanced options icon to see offset and length fields. Tap the icon again to hide the advanced options.

Memory Bank options now have extended menu options to choose directly interested area of memory bank. This avoids typing of offset and length etc.

#### **Read/Write**

Read/Write options are:

- Tag ID and Password values are in hex. Tag ID is edited.
- Memory Bank options EPC, TID, USER, PC and CRC, Access Password, Kill Password.
- Offset and Length values are in 16-bit words. This is only available after tapping the Advance Options icon. To toggle visibility, tap Advanced Options again.
- Access operation screen maintains edited tag ID.

#### Lock

Lock privilege options are as follows:

- Read and Write
- Permanent Lock
- Permanent Unlock
- Unlock

#### Kill

Permanently renders the tag unusable. A Kill Password must be provided.

## **Application Settings**

From the **Settings** screen, select **Application**.

Figure 30	Settings - Application Screen
-----------	-------------------------------

+ Application	
Reader Connection Settings	
Auto Connect Reader	-
Notification Settings	
Reader Connection	
Reader Battery Status	-
Data Export Settings	
Export Deta	0
Match Mode	
Tag List Moton Mode	
Show Friendly Names	63
ASCII Mode	

#### Table 10 Application Settings

Settings Option	Description
Auto Reconnect Reader	When checked, the device connects to the RFID service which manages the connection to the reader.
Reader Connection Notification	When checked, the application notifies the user when the reader is connected or disconnected.
Reader Battery Status Notification	When checked, the application notifies the user when the battery has reached specific critical states.
Export Data	When checked, the application writes the inventoried RFID data to a file when the inventory operation stops. On Android platforms the file is saved in a fixed directory. Check the files in file browsing in the Inventory directory (Sdcard/inventory/ <files>). The files may be copied to a PC.</files>
Tag List Match Mode	Check to enable matching mode.
Show Friendly Names	Check to show the tag's friendly names instead of EPC ID. Show friendly names is only available when Tag List Match Mode is enabled.
ASCII Mode	Displays tag ID in ASCII format. If the full tag ID or memory bank data is convertible to ASCII format, then the application only shows the same. Inventory, Locate, Access, and Pre Filters show ASCII mode represented data in respective sections.

# 123RFID Desktop Application

123RFID Desktop is a setup and optimization tool for the RFD40 Standard RFID Sled. This section describes the application and its features.

## **123RFID Desktop Features**

- Connect allows users to search for readers on the local subnet or USB port.
- Read allows users to start an inventory, view summary metrics on tag reads and sort, filter and export tag data. Select an antenna and set the power level to begin building an inventory.
- Configure allows users to configure reader and antenna settings. Settings can be saved to a file or as a printed report.
- Firmware allows users to update the firmware on up to five devices.

## Connect

Users can locate readers on the local subnet or via USB port by clicking the **Find Readers** button or by entering the IP, hostname or COM port and clicking **Connect**.

颜. 12	23RFID Desktop	
Connect Connect Configure Configure Firmware	Welcome         Find Network and USB Readers         Clock to find reader(s) on local subnet or USB port.         PRO READERS         Owneet a Reader by IP or Hostname or COM port         Enter reader's IP address or hostname or COM port below.         Inter Providence in COM port         Connect a Reader to COM port	

Figure 31 Adapter Installation

To discover readers on the network view the Available Readers section of the application and click Connect on one of the associated rows to connect to the specified reader.



-	121ARD Desktop		
100	Reader Discovery		
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-			

## Read

The read feature allows users to start an inventory. Users can view summary metrics on tag reads by reader, sort, filter and export tag data to a file. Select antenna and set power level to do inventory.



Figure 33 Data View

Click the **Start button** to start reading tags and recording an inventory.

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To download the inventory data for offline view:

1. Click the Export button to export tag data to excel.

- a. Export Summary Save a snapshot of all the tag reads displayed on Read screen, in excel.
- b. Export History Save timeline data for tags read, in excel.

To edit access operation information on a specific tag, select and double click on the associated tag row.

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-	nene Trill Second State		

Figure 35 Access Operations

To access specific tag location details, click on the Tag Locate tab.

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	Data View	7- 1,185- 308- temptarter
(H) (A) (A)		
4	tenne - Nacional Marcine Marcin Marci	

#### Figure 36 Tag Locate

## **Reader Configuration**

The Reader Configuration wizard configures the reader and antenna settings and saves them instantly. Users can also save settings to a file on the PC or print a report.

- 1. Click Edit Configuration on Reader to edit reader's settings and use the wizard to do the following:
  - Assign names to reader and its connected antennas.
  - Set antenna settings or reset them to factory defaults.
  - Change reader's region configuration.
  - Create rules for your GPIO (General Purpose Input/Output) accessories on when to trigger inventory and output results.
  - Save/print configurations to a file.
- 2. Click Load a Saved Configuration File to Reader to load a saved configuration file from the PC to another connected reader.

#### Figure 37 Configuration Settings



## **Reader Name**

Add a description or name the reader by filling out the form fields on the name screen.

<b>8, 123</b>	FID Desktop	
(+) (+) (+) (+) (+) (+) (+) (+) (+) (+)		
4		

#### Figure 38 Name Screen

#### **General Parameter Settings**

Configurable general parameter settings include trigger mode (RFID or barcode), beeper volume (high/medium/low/quiet), dynamic power (enable or disable) and unique tag reporting (enable or disable).



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## **Region Configuration**

To set up the region in which the reader will be used, select the Region of Operation from the drop down menu. Next, select the appropriate channels by clicking the associated check boxes.

Ensure that the reader is configured for the correct region that it will be used in. Configuring the device for a different region is illegal.



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## Antenna Configuration

Configure the name and color of the antenna, enable or disable Select for Reads, adjust the power (dBm), and enable different RF modes using Antenna Port Settings.

Figure 41 Antenna Port Configuration



## **Trigger Configuration**

Triggers that indicate to the device to start reading tags can be configured to occur during specific events such as what Start is pressed, when the handheld trigger is pressed, or after a specified duration (ms).

Triggers that indicate to the device to stop reading tags can be configured to occur after specific events such as when Stop is pressed, a specified amount of tag reads, a specified duration of time (ms), a specific number of inventory rounds complete, or when the handheld trigger is released.



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## **Pre-Filter Configuration**

Configure pre-filters by first enabling the filter by clicking the checkbox. Next, enter the data into the tag pattern field, select the target, memory, and action from the associated dropdown menus. Last, enter the offset into the form field and click Next.

Figure 43 Pre-Filter Configuration



## **Advanced Configuration Settings**

Enable Editing of Advanced Settings, then choose antenna singulation from the dropdown menu, select State Aware options, and determine the Tag Population Estimate. Click Sync to save the changes and complete the configuration workflow.





## Save and Print Configuration

Save the configuration file to the PC, push the antenna settings to the reader, or reset the antenna settings to factory defaults at the end of the configuration workflow.

Figure 45 Save Configuration

🗞 123RFID Desktop		
E . 14 [3	First         Problem Roder Coolgenden           Die State         State           Die State         State	

## **Firmware Management**

To update reader firmware on up to five devices simultaneously, select the devices on the table by clicking the associated checkbox and click the **Update Firmware** button.



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Next, the Reader Firmware Update window displays. Click Browse to select the firmware version to be enabled onto the selected device.

#### Figure 47 Select a Firmware Update

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Once the firmware file is selected, the update starts and the progress bars next to the associated readers indicate the completion percentage of the update.

Figure 48 Firmware Update Progress



## **Regulatory Information**

This device is approved under Zebra Technologies Corporation.

This guide applies to the following model number: RFD4030 All Zebra devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labeled as required.

Local language translation / Tradução do idioma local / Übersetzung in die lokale Sprache / Raduccion de idioma local / Traduction en langue locale / Prijevod na lokalni jezik / Traduzione in lingua locale / 現地語の翻訳 / 현지 언어 번역 / Перевод на местный язык / 本地語言翻譯 / 本地语言翻译 / Yerel dil çeviri /Tłumaczenie na język lokalny: zebra.com/support

Any changes or modifications to Zebra equipment not expressly approved by Zebra could void the user's authority to operate the equipment.

Declared maximum operating temperature: 50°C

For use only with Zebra approved and UL Listed mobile devices, Zebra approved, and UL Listed/Recognized battery packs.

## **Regulatory Markings**

Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use. Refer to the Declaration of Conformity (DoC) for details of other country markings. The DOC is available at: zebra.com/doc.

## **Health and Safety Recommendations**

## **Ergonomic Recommendations**

In order to avoid or minimize the potential risk of ergonomic injury, always follow good ergonomic workplace practices. Consult with your local Health and Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

## Safety in Hospitals and Aircraft



**NOTE:** Wireless devices transmit radio frequency energy that may affect medical electrical equipment and aircraft's operation. Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, healthcare facilities or by airline staff. These requests are designed to prevent possible interference with sensitive equipments.

## **Medical Devices**

It is recommended that a minimum separation distance of 20 cm (8 inches) be maintained between a wireless device and a medical devices such as pacemakers, defibrillator, or other implantable devices to avoid potential interference with the medical device. Pacemaker users should keep the device at the opposite side of the pacemaker or turn OFF the device if suspected of interference.

Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.

## **RF Exposure Guidelines**



## Safety Information

#### **Reducing RF Exposure – Use Properly**

Only operate the device in accordance with the instructions supplied.

The device complies with internationally recognized standards covering human exposure to electromagnetic fields. For information on international human exposure to electromagnetic fields, refer to the Zebra Declaration of Conformity (DoC) at zebra.com/doc.

Use only Zebra tested and approved headset, belt-clips, holsters, and similar accessories to ensure RF exposure compliance. If applicable, follow the instructions for use as detailed in the accessory guide.

The use of third-party belt clips, holsters, and similar accessories may not comply with RF exposure compliance requirements and should be avoided.

For further information on the safety of RF energy from wireless devices, refer to RF exposure and assessment standards section at zebra.com/responsibility.

To satisfy RF exposure requirements, this device must be hand-use only and, where applicable use only with Zebra tested and approved accessories.

#### **Power Supply**



**WARNING ELECTRICAL SHOCK**: Use only a Zebra approved, Certified ITE LPS power supply with appropriate electrical ratings. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

#### **Batteries and Power Packs**

This information applies to Zebra-approved batteries and power packs containing batteries.

#### **Battery Information**



**CAUTION**: Risk of explosion if battery is replaced by an incorrect type. Dispose of batteries according to instructions.

Use only Zebra approved batteries. Accessories which have battery charging capability are approved for use with the following battery models:

Model BT-000380 (3.6 VDC, 7000 mAh)

Zebra approved rechargeable battery packs are designed and constructed to the highest standards within the industry.

However, there are limitations as to how long a battery can operate or be stored before needing replacement. Many factors affect the actual life cycle of a battery pack such as heat, cold, harsh environmental conditions, and severe drops.

When batteries are stored over six months, some irreversible deterioration in overall battery quality may occur. Store batteries at half charge in a dry, cool place, removed from the equipment to prevent loss of capacity, rusting of metallic parts, and electrolyte leakage. When storing batteries for one year or longer, the charge level should be verified at least once a year and charged to half charge.

Replace the battery when a significant loss of run time is detected.

• Standard warranty period for all Zebra batteries is one year, regardless if the battery was purchased separately or included as part of the host device. For more information on Zebra batteries, please visit: zebra.com/batterydocumentation and select the Battery Best Practices link.

#### **Battery Safety Guidelines**



**IMPORTANT** – SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

**WARNING** – When using this product basic safety precautions should always be followed, including the following:

The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non-commercial environment.

- Read all the instructions before using the product.
- Follow battery usage, storage, and charging guidelines found in the user's guide.
- Improper battery use may result in a fire, explosion, or other hazard.

To charge the mobile device battery, the battery and charger temperatures must be between  $0^{\circ}C$  and  $+40^{\circ}C$  ( $+32^{\circ}F$  and  $+104^{\circ}F$ ).

Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact Zebra support.

For devices that utilize a USB port as a charging source, the device shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.

Do not disassemble or open, crush, bend or deform, puncture, or shred. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.

Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.

Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.

Do not modify, disassemble, or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water, rain, snow or other liquids, or expose to fire, explosion, or other hazard.

Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.

To reduce the risk of injury, close supervision is necessary when used near children.

Please follow local regulations to promptly dispose of used re-chargeable batteries.

Do not dispose of batteries in fire. Exposure to temperatures over 100°C (212°F) may cause explosion.

Seek medical advice immediately if a battery has been swallowed.

In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.

If you suspect damage to your equipment or battery, contact Zebra support to arrange for inspection.

## **C E** Marking and European Economic Area (EEA)

#### **Statement of Compliance**

Zebra hereby declares that this radio equipment is in compliance with Directives 2014/53/EU and 2011/65/EU.

Any radio operation limitations within EEA countries are identified in Appendix A of EU Declaration of Conformity. The full text of the EU Declaration of Conformity is available at: zebra.com/doc.

## Waste Electrical and Electronic Equipment (WEEE)

For EU and UK Customers: For products at the end of their life, please refer to recycling/disposal advice at: zebra.com/weee.

EU Importer: Zebra Technologies B.V Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

## **United States and Canada Regulatory**

#### **Radio Frequency Interference Notices**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.



**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Radio Frequency Interference Requirements – Canada

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **RF Exposure Requirements - FCC and ISED**

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated in compliance with the FCC RF emission guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of fcc.gov/oet/ea/fccid.

To ensure compliance with FCC/ISED RF exposure requirement, the user shall keep the front of the RFID Device transmitting antenna at least 21 cm away from any nearby persons.

Pour assurer la conformité avec l'exigence d'exposition aux radiofréquences USED, l'utilisateur doit garder l'avant de l'antenne d'émission du dispositif RFID à au moins 21 cm de toute personne à proximité.

#### Limb-worn Devices

To satisfy RF exposure requirements, this device must be hand-held only and, where applicable use only with Zebra tested and approved accessories.

#### **Co-located Statement**

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located (within 20 cm) or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

## Brasil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Este produto está homologado pela Anatel de acordo com os procedimentos regulamentados para avaliação da conformidade de produtos para telecomunicações e atende aos requisitos técnicos aplicados, incluindo os liYDmites de exposição da Taxa de Absorção Específica referente a campos elétricos, magnéticos e eletromagnéticos de radiofrequência.

Este dispositivo está em conformidade com as diretrizes de exposição à radiofrequência quando posicionado a pelo menos 1,5 centímetro de distância do corpo.

Valor Máximo de SAR: 0,840 W/kg (corpo).

## 中国

通过访问以下网址可下载当地语言支持的产品说明书 zebra.com/support 如果配套使用外部电源适配器,请确保其已通过 CCC 认证



## 产品中有害物质的名称及含量

部件名称	有害物质						
	铅	汞	镉	六价铬	多溴联 苯	多溴二 苯醚	
金属部件	0	0	0	0	0	0	
电路模块	Х	0	0	0	0	0	
电缆及电缆组件	0	0	0	0	0	0	
光学和光学组件	0	0	0	0	0	0	
电池	0	0	0	0	0	0	
本表格依据 SJ/T 11364 的规定编制。							
O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。							
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。(企业可在此 处,根据实际情况对上表中打 "×" 的技术原因进行进一步说明。							

## Евразийский Таможенный Союз (ЕАС)

Данный продукт соответствует требованиям знака EAC.

# EHC

## France

Cet appareil a été testé et déclaré conforme aux limites applicables d'exposition aux radiofréquences (RF).

Le débit d'absorption spécifique (DAS) local quantifie l'exposition de l'utilisateur aux ondes électromagnétiques de l'équipement concerné.

Les valeurs SAR les plus élevées sont disponibles sur la déclaration de conformité (DoC) disponible sur: zebra.com/doc

#### México

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

臺灣

低功率電波輻射性電機管理辦法

取得審驗證明之低功率射頻器材,非經核准,公司、商號或使用者均不得擅自變更頻率、加大功率或變更 原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至 無干擾時方得繼續使用。

前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及 醫療用電波輻射性電機設備之干擾。

公司資訊

台灣斑馬科技股份有限公司 / 台北市信義區松高路 9 號 13 樓

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行政院環保署 (EPA) 要求乾電池製造或進口商,需依廢棄物清理法第 15 條之規定,於販 售、贈送或促銷的電池上標示回收標誌。請聯絡合格的台灣回收廠商,以正確棄置電池。

「廣電池滿回收」

#### 限用物質含有情況標示聲明書

設備名	型號 (型式)						
	限用物質及其化學符號						
單元	鉛	汞	鎘	六價 鉻	多溴 聯苯	多溴二 苯醚	
印刷電路板及電子	-	0	0	0	0	0	
金屬零件	-	0	0	0	0	0	
電纜及電纜組件	0	0	0	0	0	0	
塑料和聚合物零件	0	0	0	0	0	0	
光學與光學元件	0	0	0	0	0	0	
備考 1. <sup>*</sup> 超出 0.1 wt % <sup>″</sup> 及 <sup>*</sup> 超出 0.01 wt % <sup>″</sup> 係指限用物質之百分比含量超出百分比 含量基準值。							
備考 2.      ́ O ″  係指該項限用物質之百分比含量未超出百分比含量基準值。 備考 3.    ̃─″  係指該項限用物質為排除項目。							
Note 1: "Exceeding 0.1 wt%" and "exceeding 0.01 wt%" indicate that the percentage content							

of the restricted substance exceeds the reference percentage value of presence condition. Note 2: "O" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

#### Note 3: The "-" indicates that the restricted substance corresponds to the exemption.

## TÜRK WEEE Uyumluluk Beyanı

EEE Yönetmeliğine Uygundur.

## ประเทศไทย

้ เครื่ องโทรคมนาคมและอุ ปกรณ์ นี้ มี ความสอดคล้ องตามข้ อกำหนดของ กทช .

้เครื่ องวิ ทยุ คมนาคมนี้ มี อั ตราการดู ดกลื นพลั งงานจำเพาะ (Specific Absorption Rate – SAR) อั นเนื่ องมาจากเครื่ องวิ ทยุ คมนาคมเท่ ากั บ

ีซึ่งสอดคล้องตามมาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโ ทรคมนาคมแห่ งชาติ ประกาศกำหนด

้ เครื่ องวิ ทยุ คมนาคมนี้ มี ระดั บการแผ่ คลื่ นแม่ เหล็ กไฟฟ้ าสอดคล้ องตาม มาตรฐานความปลอดภั ยต่ อสุ ขภาพของมนุ ษย์ จากการใช้ เครื่ องวิ ทยุ คมนาคมที่ คณะกรรมการกิ จการ

โทรคมนาคมแห่ งชาติ ประกาศกำหนด

## United Kingdom CA Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with the Radio Equipment Regulations 2017 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

Any radio operation limitations within UK are identified in Appendix A of UK Declaration of Conformity.

The full text of the UK Declaration of Conformity is available at: zebra.com/doc.

UK Importer: Zebra Technologies Europe Limited Address: Dukes Meadow, Millboard Rd, Bourne End, Buckinghamshire, SL8 5XF

## Warranty

For the complete Zebra hardware product warranty statement, go to: zebra.com\warranty.

## **Service Information**

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

If you have a problem running your unit or using your equipment, contact your facility's Technical or System Support. If there is a problem with the equipment, they will contact Zebra support at zebra.com/support.

For the latest version of the guide go to: zebra.com\support.

## **Additional Information**

For information on using the RFD4030, refer to the RFD4030 product guide available at: zebra.com/support.

## UHF RFID Gun powered by Zebra Quick Start and Regulatory Guide

QSG 230135 A00





| Non-Contractual Picture |

20 Roe Georges Claude - 21 Les Milles 12290 Als-an-Provence FRANCE 1. +33 (0)4 42 65 25 65 E +38 (0)4 42 51 57 82

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