



VULCAN RFID™

FORGING INNOVATION

Navigating Vulcan RFID Connect

Introduction

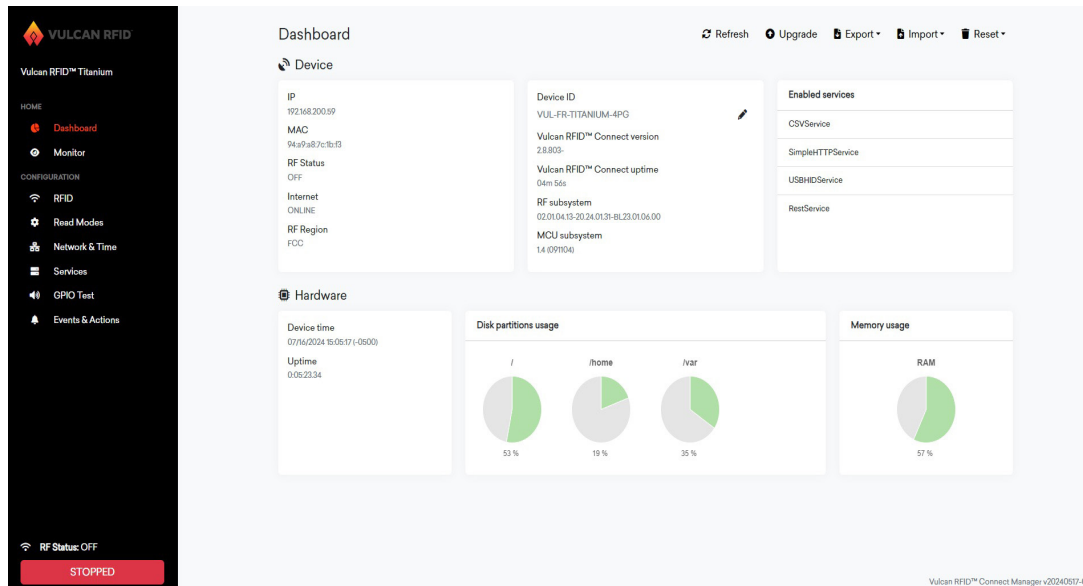
Vulcan RFID Connect comes pre-installed on all Vulcan RFID Titanium readers. This document will take you through the software's main categories to give you an overview of its functionality.

For an in-depth guide to Vulcan RFID Connect, please visit vulcanRFID.com/support or email info@vulcanRFID.com.

First, be sure you are connected to the reader and logged in to Vulcan RFID Connect. These instructions are covered in the [Getting Started document](#).

Main Dashboard

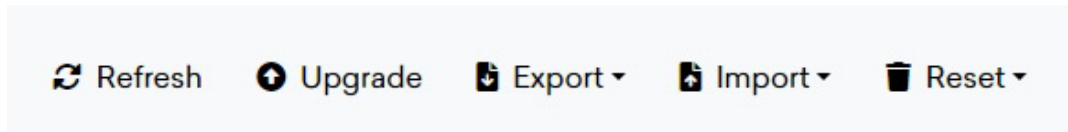
The dashboard is the first page you see after logging in.



The dashboard displays a variety of useful information, such as:

- **Device info** – IP address, MAC address, RF status, Internet availability, Vulcan RFID Connect version and uptime
- **Enabled services** – All enabled services, regardless of their configuration
- **Hardware info** – Time and date, reader uptime, memory usage

At the top of the dashboard is the toolbar:

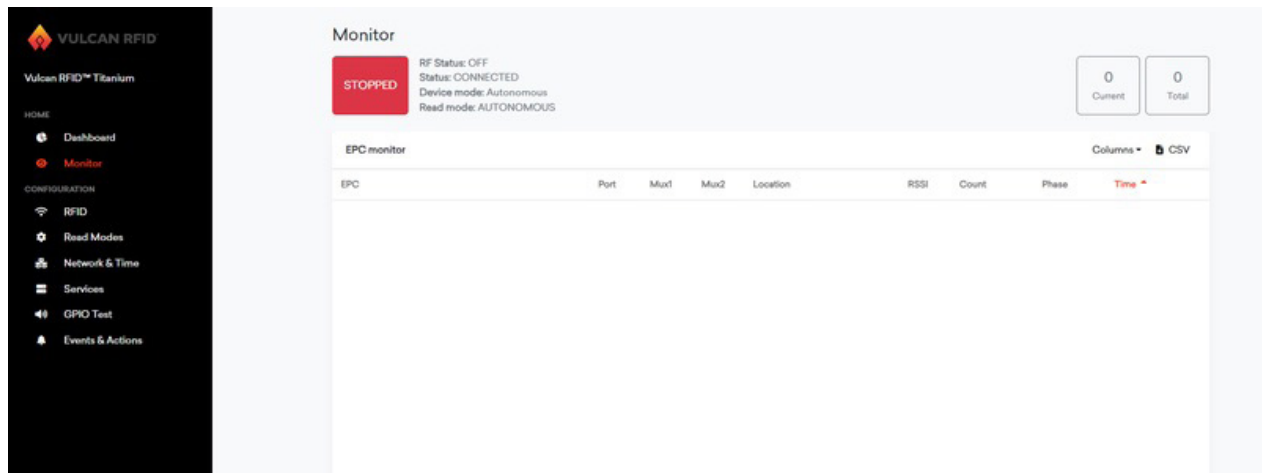


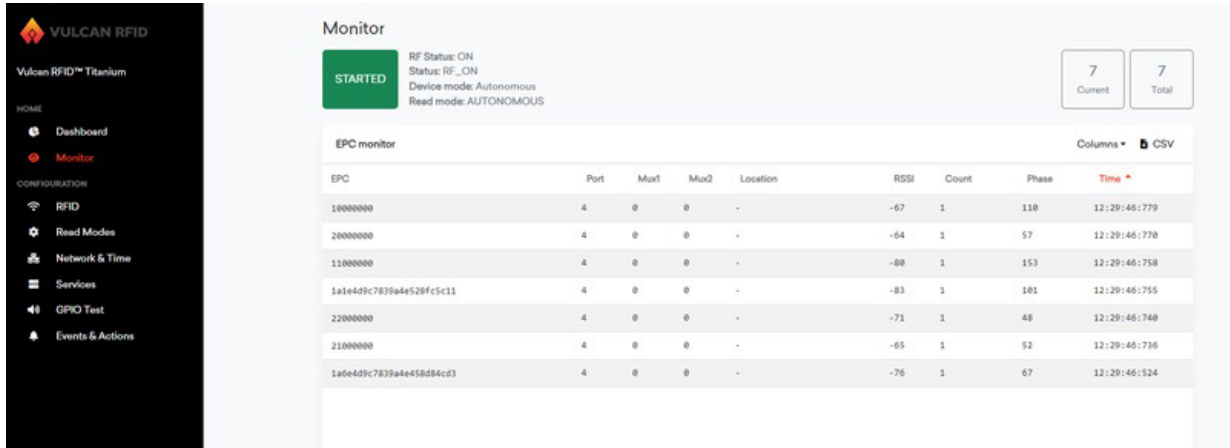
- **Refresh** – Refresh the dashboard
- **Upgrade** – Upgrade the Vulcan RFID Connect version, install SQL libraries, and install other programs onto the reader
- **Export** – Export the system logs file, services configuration file, and device configuration file, as well as a CSV file of tag reads (which is configurable in the Services tab)
- **Import** – Import device configuration file and services configuration file
- **Reset** – Reset the device to factory defaults, reset the reader logs and CSV data, and reboot Vulcan RFID Connect

Monitor Tab

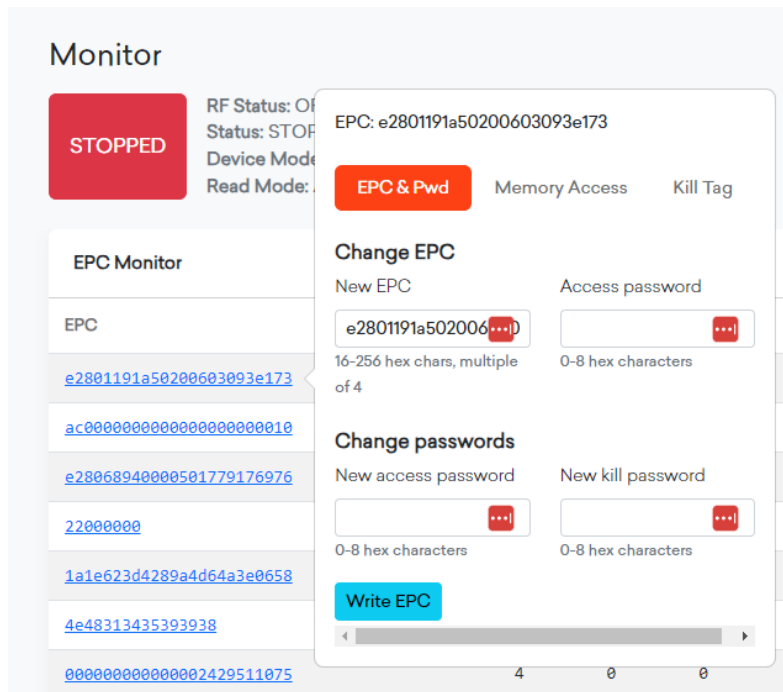
The monitor is where you start and stop RF power, view the live stream of tag reads, and export the session's CSV file.

Note that the CSV file here is different than the one on the main Dashboard – the CSV from the Dashboard contains all data from when the reader was first powered on and is configurable in the Services tab. The CSV in the Monitor contains data from a single inventory session.



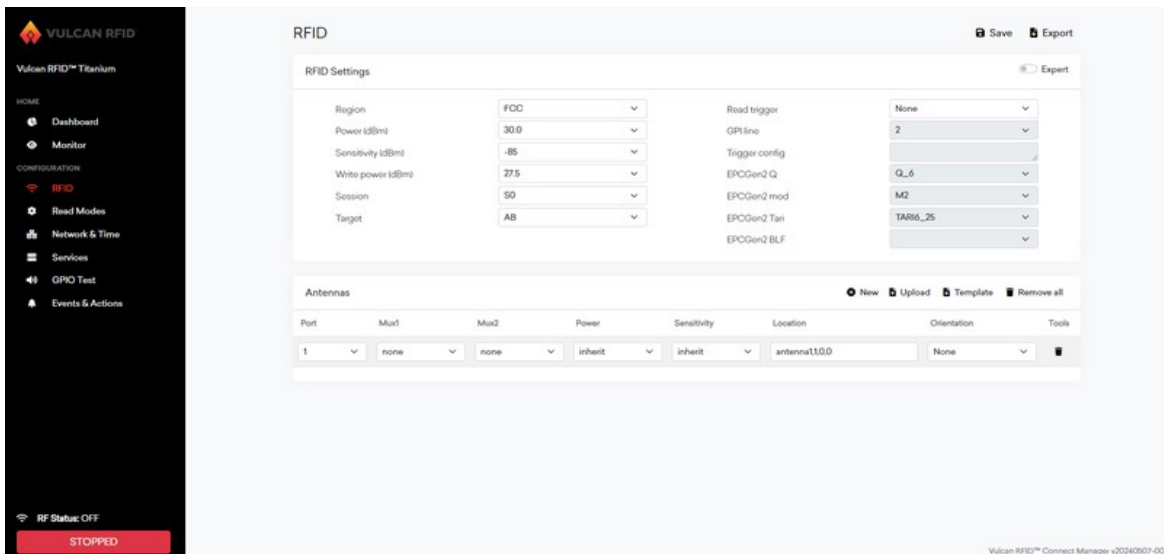


You can also use the Monitor to quickly write to tags.



RFID Tab

The RFID tab is where you configure the Titanium's RFID parameters.

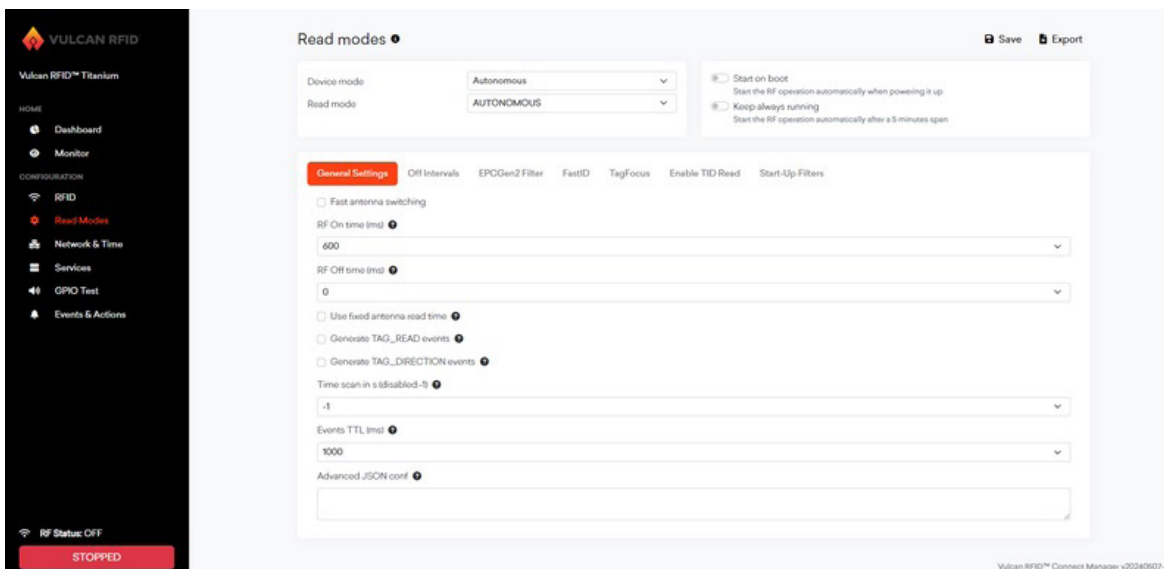


- **Region** - Select your operating region
- **Power/Sensitivity** - Choose your preferred transmit power and reader sensitivity
- **Session/Target** - Choose the reader session and search target
- **Read Trigger** - Configure GPI triggeres to start/stop RF operations
- **Antennas** - Add or remove antennas manually or download a template to upload antennas in bulk
- **Save** - Save the current settings
- **Export** - Export the current settings to a .xml file

For more detailed information on configuring the RFID settings, please visit vulcanRFID.com/support or email info@vulcanRFID.com.

Read Modes Tab

The Read Modes tab is where you choose settings for how the reader will take inventory.



Device and Read Mode:

1. Autonomous (default)

- **AUTONOMOUS:** The reader schedules antenna switching automatically between the available RF ports (1, 2, 3 or 4).
- **AUTONOMOUS_TRACK_MISSING:** Keeps a list of continuously read tags and generates an event when one of the controlled tags has left the field of view.
- **SCAN:** To be used at read points where we want information on tags passing through the field of view. Not designed to inventory static tags.

2. Sequential

- **SEQUENTIAL:** The reader waits for read commands.
- **DYNAMIC_INVENTORY:** Keeps track of tags in the field and generates TAG_ADD and TAG_REMOVED events.

EPCGen2 Filter: Enable Tag Filtering

Read modes Save Export

Device mode	Autonomous	<input type="checkbox"/> Start on boot Start the RF operation automatically when powering it up
Read mode	AUTONOMOUS	<input type="checkbox"/> Keep always running Start the RF operation automatically after a 5 minutes span

General Settings Off Intervals **EPCGen2 Filter** FastID TagFocus Enable TID Read Start-Up Filters

Mask offset (bits)

Filter mask (hex)

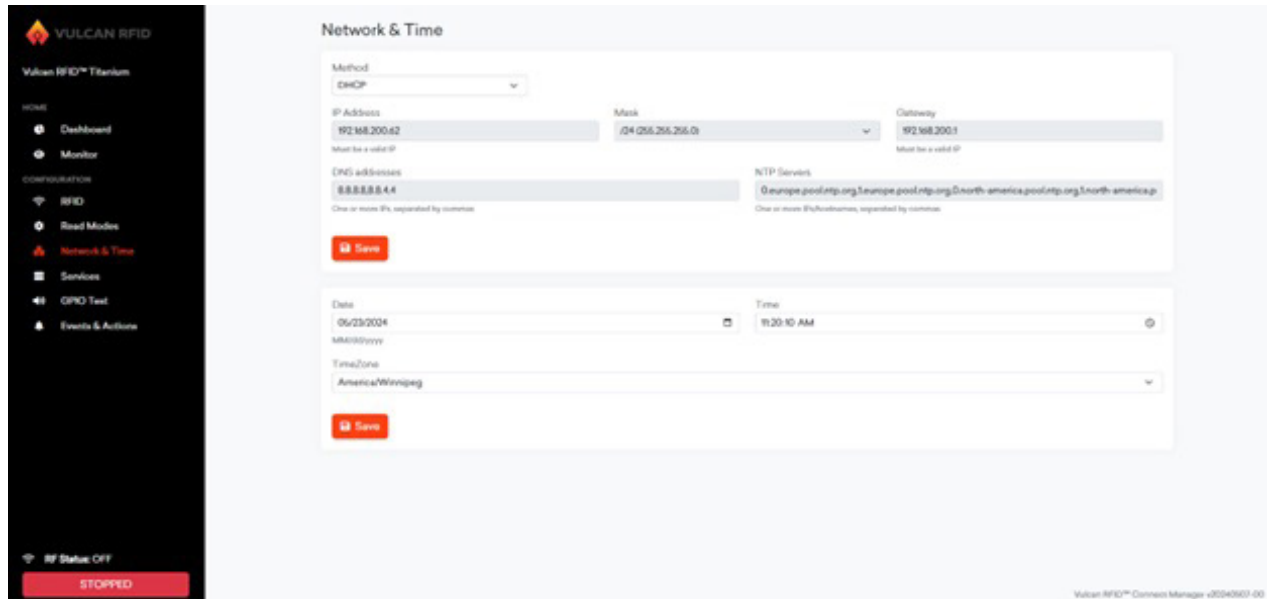
Mask length (bits)

Use SW filter only
May lead to a degraded performance in read intensive applications

Allow Extended EPC Filter

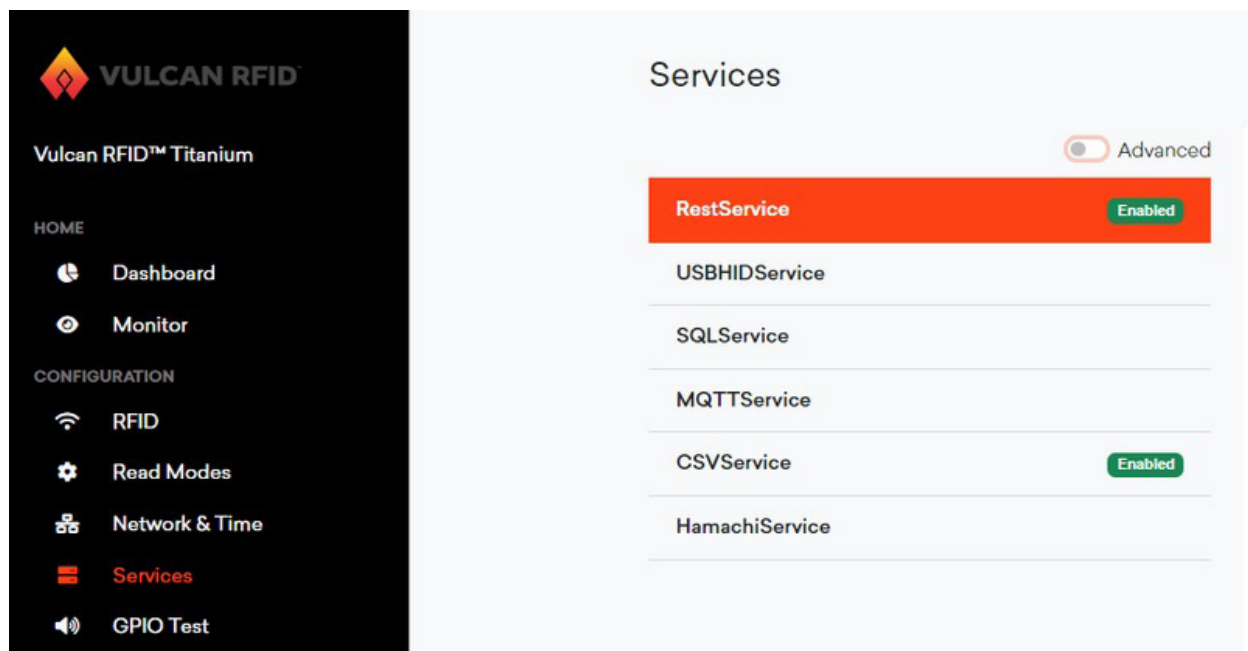
Network and Time Tab

The Network and Time tab is where you choose the reader's date and time, as well as configure a static IP address.



Services Tab

Enable and configure data output in the Services tab.



REST Service – Configure the REST API authentication method.

USB HID Service – Enable and configure USB HID emulation.

SQL Service – Enable and configure data output to a SQL-compatible database. Requires installing required SQL libraries.

MQTT Service – Enable and configure data output to MQTT brokers.

CSV Service – Configure the CSV file that comes from the Export button on the main Dashboard.

Hamachi Service – Enable and configure a VPN through Hamachi. Requires an existing LogMeIn account.

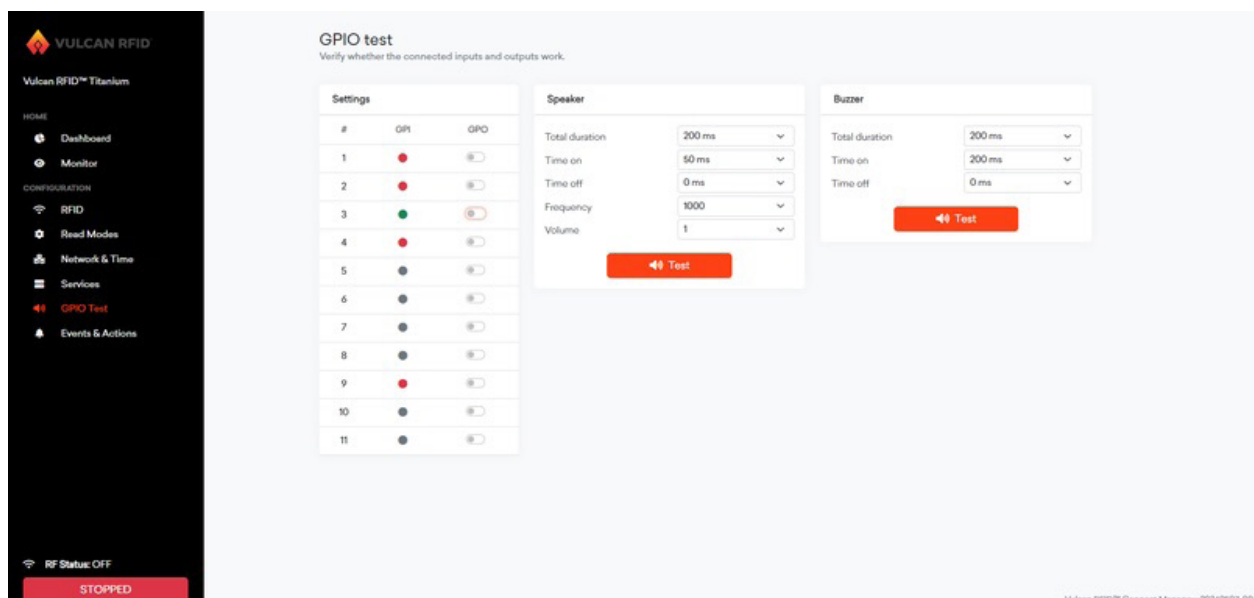
HTTP Service – More advanced configuration than Simple HTTP Service.

Simple HTTP Service – Enable and configure data output to an HTTP endpoint in either XML or JSON.

For more detailed information on configuring services, please visit vulcanRFID.com/support or email info@vulcanRFID.com.

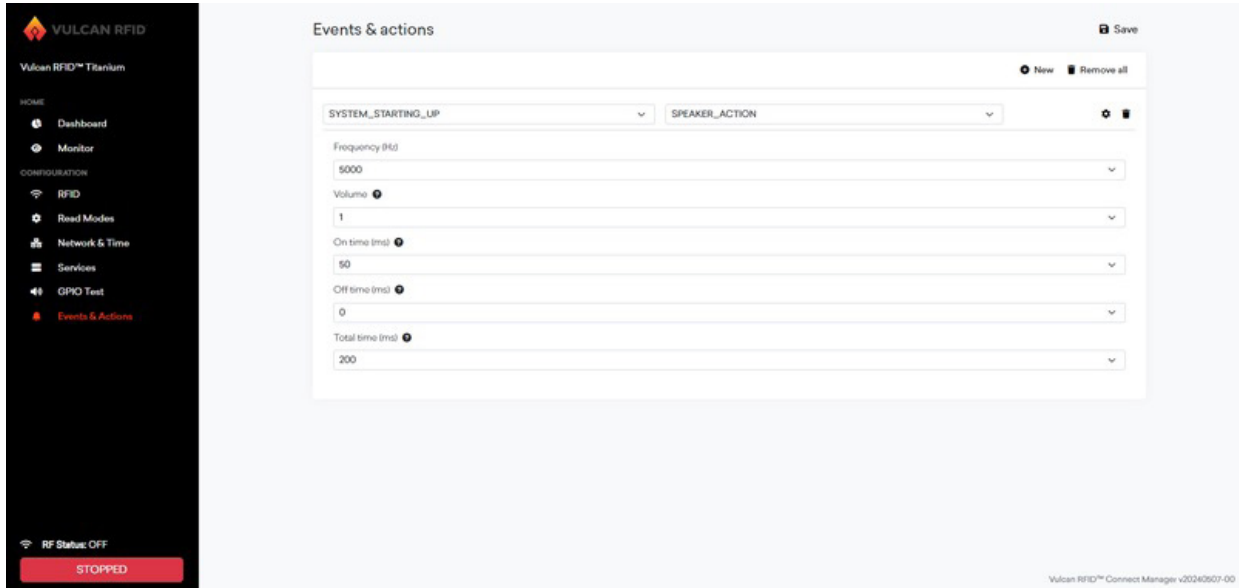
GPIO Test Tab

Here, you can test GPIO connections to ensure they work properly.



Events and Actions Tab

Under Events & Actions, you can configure the GPIO trigger and action details.



For more detailed information on configuring GPIO, please visit vulcanRFID.com/support or email info@vulcanRFID.com.