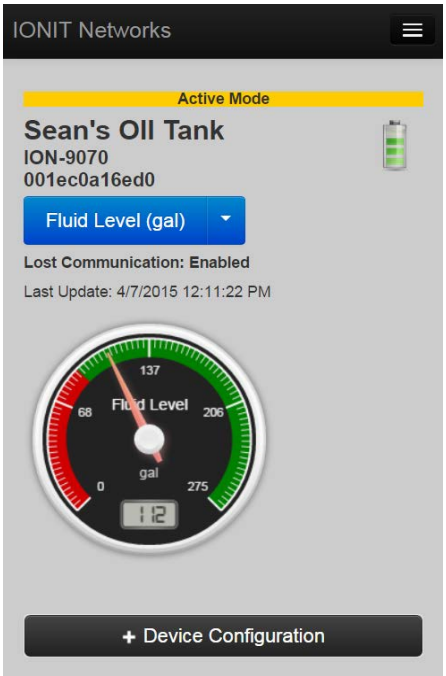
How To Manage Your IONIT Device Batteries

OVERVIEW



Various IONIT devices are battery-powered. It is important to monitor the health of your batteries and replace batteries with low voltages to ensure continued operation of the IONIT devices. In this document, we will explain how to interpret the battery meter shown in the IONIT web app, and the battery data from within the IONIT Cloud software. Lastly, we will provide an example of how to setup a low battery alert within the Cloud software.

***IMPORTANT**: IONIT devices ship to our customers with full batteries. The batteries are designed to operate under normal conditions for approximately 3 years. However it is difficult to accurately predict battery life-expectancy due to variations in battery manufacturing characteristics, and environmental factors at the installed location of the device. Temperature, both highs and lows, will affect the batteries life-expectancy.*

READING THE BATTERY METER (Web App)

When scanning the QR codes found on your IONIT devices with your smartphone, you will be viewing the IONIT web application. If your device is battery-powered, there will be a battery meter in the upper right corner of your screen as shown in the image above.

	**Full Battery – 4 green bars** When the battery reports a voltage of 2.9 Volts or greater, the battery is at full capacity and the battery meter displays 4 green bars.
	**75% Battery – 3 green bars** When the battery reports a reading less than 2.9 Volts but greater than 2.75 Volts, the battery meter displays 3 green bars and indicates it is at approximately 75% capacity.
	**50% Battery – 2 green bars** When the battery reports a reading less than 2.75 Volts but greater than 2.5 Volts, the battery meter displays 2 green bars and indicates it is at approximately 50% capacity.
	**25% Battery – 1 green bar** When the battery reports a reading less than 2.5 Volts but greater than 2.3 Volts, the battery meter displays 1 green bar and indicates it is at approximately 25% capacity.
	**Low Battery – 1 red bar** When the battery reports a reading less than 2.3 Volts, the battery is in a “low battery” state and should be replaced.

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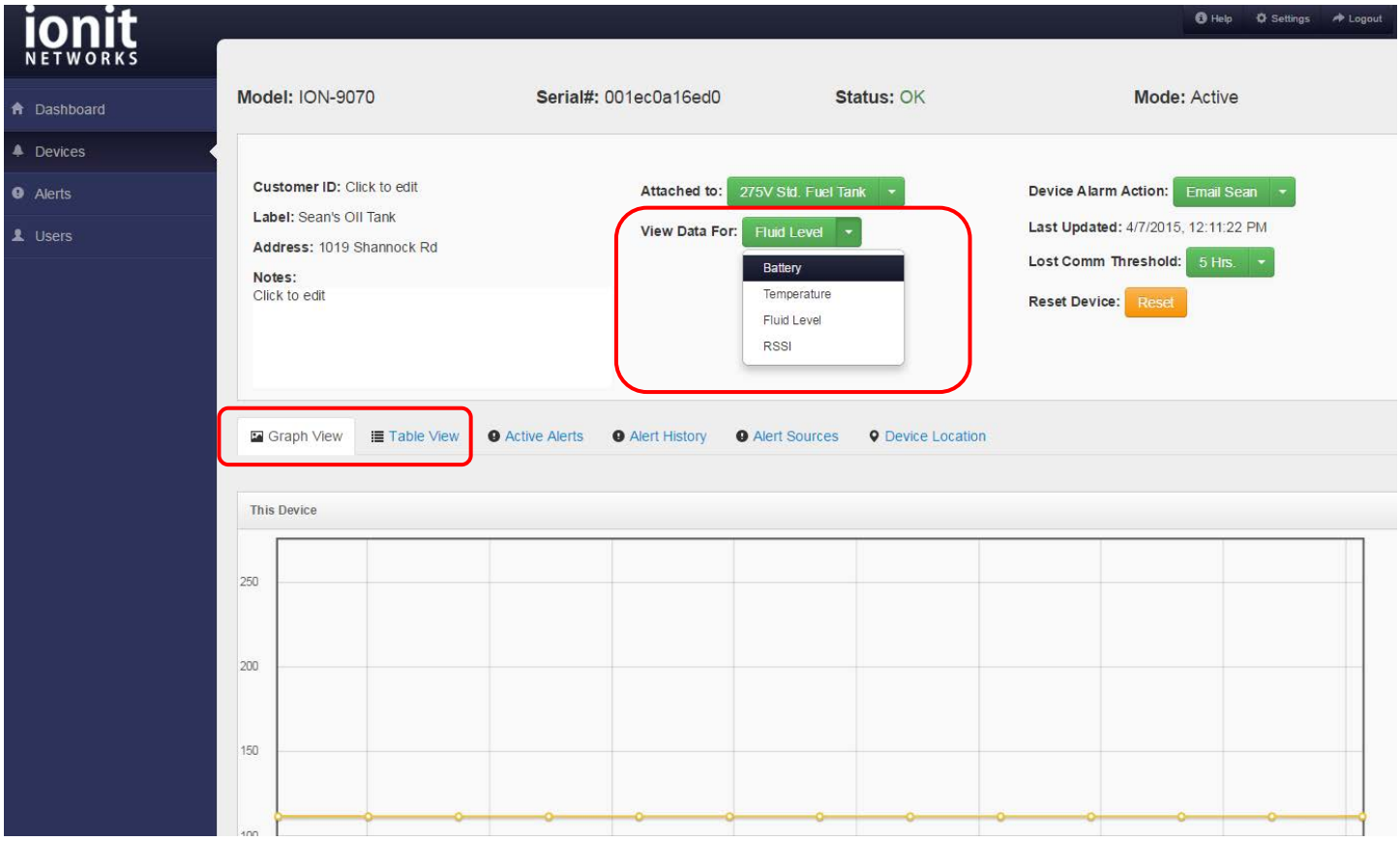
VIEWING BATTERY DATA (Cloud Software)

From within the IONIT Cloud software, the battery voltage of any device can be checked by selecting “Battery” from the [View Data For:] button. Then select either [Graph View] or [Table View] to see the results.



The battery voltages have the same meanings as described in the above table for the Battery Meter. Any reading over 2.9 Volts indicates a full battery, where as any reading under 2.3 Volts indicates a “low battery” and it should be replaced.

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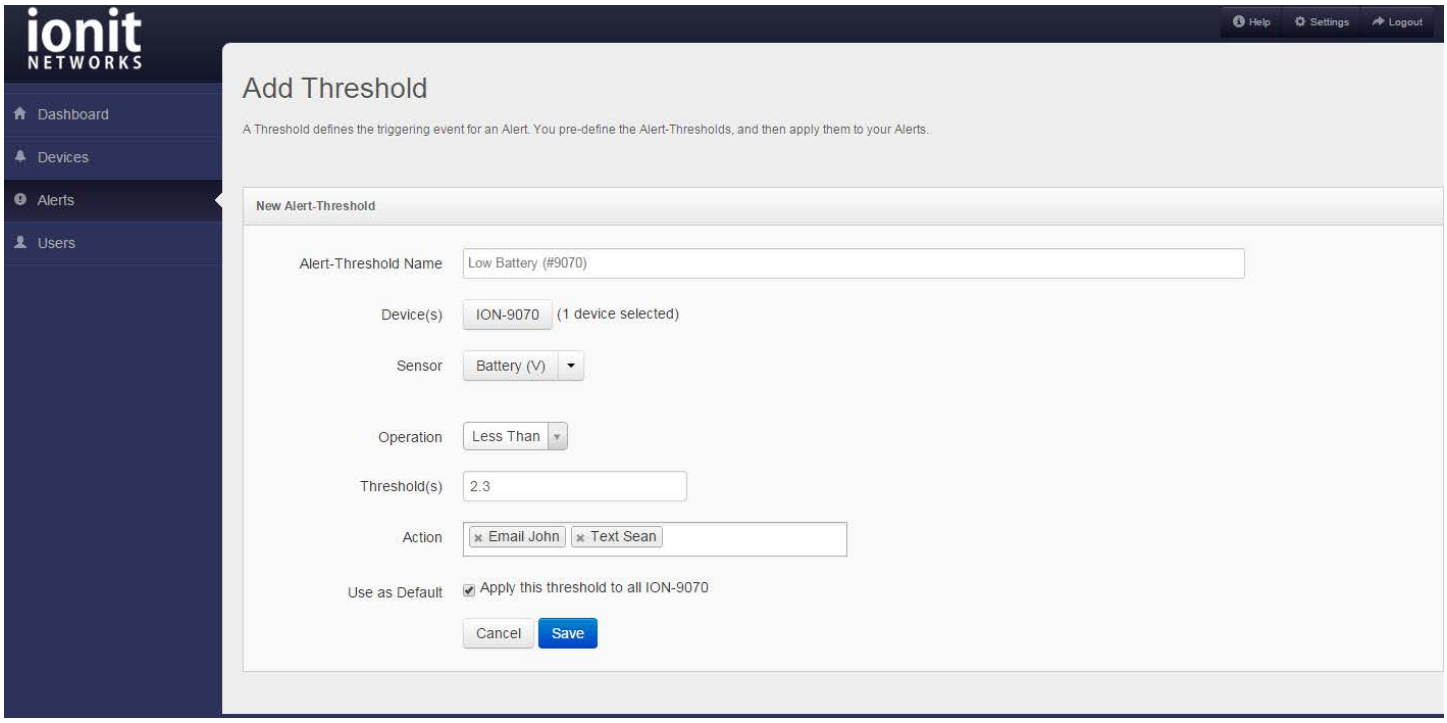
HOW TO SETUP A GLOBAL "LOW BATTERY" ALERT

IONIT recommends you create a "low battery" alert for each device type you have in your network. Here's how to create it.

From within the IONIT Cloud software, click on Alerts from the left menu, then Thesholds. Then click the "+New Threshold" button in the upper right corner of the screen. On the Add Threshold form, name the threshold "Low Battery" followed by the device type or other name that you will understand. For example, if you are creating a global alert for all #9070 rockets you might name the threshold "Low Battery (#9070)" or "Low Battery Gray Rockets".

Then, click the Device button and select only one device of the device type (e.g. #9070, #9071, #9470…) you want to generate an alert. Select "Battery" as the Sensor type. Select "Less Than" for the Operation, and enter 2.3 for the Threshold. Then select the Action you want to occur when the Threshold is triggered – if you do not select an Action the system will still generate an alert in the software as indicated on the device's page and when viewing all alerts. And now click the checkbox next to "Use as Default" which will apply this Threshold to all devices in your network of the same type. Finally, click Save. Repeat these steps for all other device types in your network.



For further help please visit the "Help" link in the upper right corner of the Cloud software, or contact your IONIT representative.