



IMPRES[™] Battery Fleet Management WEB Interface User Guide for Release 4.0

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Read Me First

This manual contains information about IMPRES™ Battery Fleet Management and how to use the system with ASTRO Over-the-Air, MOTOTRBO Over-the-Air, and chargers with IMPRES Battery Fleet Management data capabilities.

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Related Publications

The following list contains part numbers and titles of related publications.

- MN007471A01, *IMPRES™ Battery Fleet Management Ordering Guide*
- MN007473A01, *IMPRES™ Battery Fleet Management Installation Manual*
- MN007495A01, *IMPRES™ Battery Fleet Management User Guide*
- MN007501A01, *IMPRES™ Battery Fleet Management Troubleshooting Guide and External Software and Component Configuration Guide*
- MN008435A01, *IMPRES™ Battery Fleet Management WEB Interface User Guide for Release 4.0*
- 6880309T12, *MOTOTRBO System Planner*
- MN008144A01, *Intelligent Middleware Installation and Configuration Manual 5.2.4*
- MN005566A01, *Intelligent Middleware Installation and Configuration 5.2 and 5.2.2*
- MN008145A01, *Intelligent Middleware Feature Manual 5.2.4*

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The following style conventions are used:

Convention	Description
Bold	This typeface is used for names of, for instance, windows, buttons, and labels when these names appear on the screen (example: the Alarms Browser window). When it is clear that we are referring to, for instance, a button, the name is used alone (example: Click OK).
Monospacing font in bold	This typeface is used for words to be typed in exactly as they are shown in the text (example: In the Address field, type <code>http://ucs01.ucs:9080/</code>).
Monospacing font	This typeface is used for messages, prompts, and other text displayed on the computer screen (example: A new trap destination has been added).
<i><Monospacing font in bold Italic></i>	<p>This typeface is used with angle brackets as placeholders for a specific member of the group that the words represent (example: <i><router number></i>).</p> <p> NOTE: In sequences to be typed in, the angle brackets are omitted to avoid confusion whether to include the angle brackets in the text to be typed.</p>
CAPITAL LETTERS	This typeface is used for keyboard keys (example: Press Y, and then press ENTER).
<i>Italic</i>	This typeface is used for citations. A citation usually is the name of a document or a phrase from another document (example: <i>Dimetra IP System Overview</i>).
→	An → (arrow pointing right) is used for indicating the menu or tab structure in instructions on how to select a certain menu item (example: File → Save) or a certain sub-tab.

Definitions

The following terms are used throughout this manual:

- **ACTIVE** - Applies to batteries that are in service.
- **INACTIVE** - Applies to batteries that are out of service, disposed, or recycled.
- **DORMANT** - Applies to batteries that have not been read by the battery fleet management system within a specified time. This time is typically set in the PC application preferences as LOST BATTERY (in days).
- **LOST BATTERY** - The older term for DORMANT batteries.
- **BATTERY LIFE AGE IN YEARS** - The expected life tracking for a battery replacement.
- **SERVICE LIFE AGE IN DAYS** - The older way the PC application tracks BATTERY LIFE AGE IN YEARS.
- **BATTERY LIFE PREDICTION** - Prediction of the remaining years a battery has before its charge drops below the anticipated ability to last a standard work shift.
- **SERVICE LIFE HEALTH %** - The older application way to track a battery remaining service before its charge drops below the anticipated ability to last a standard work shift. This is what the PC application uses to express BATTERY LIFE PREDICTION.

Chapter 1

Features of the Web Interface

The web interface consists of a main web page and a few dialog boxes. The interface limits the number of individual displays and instead present a consolidated and informative view.



NOTE: PC application needs to be installed for the first release of the web interface of some of the server and client configurations. The PC application has limited scope, but it is required for configuration.

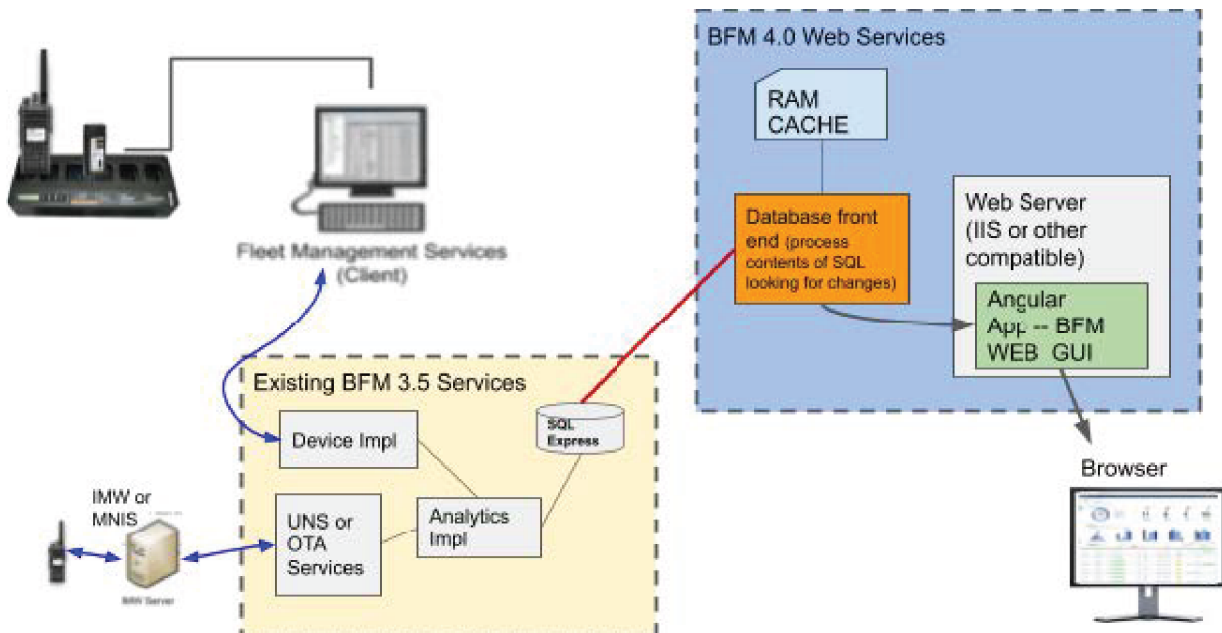
1.1

Web Server Technical Overview

This section provides the technical overview of interaction of the web server architecture with the existing 3.5.x services.

The information in the following diagram is to help IT and admins with deployment of the system.

Figure 1: Web Server Technical Overview

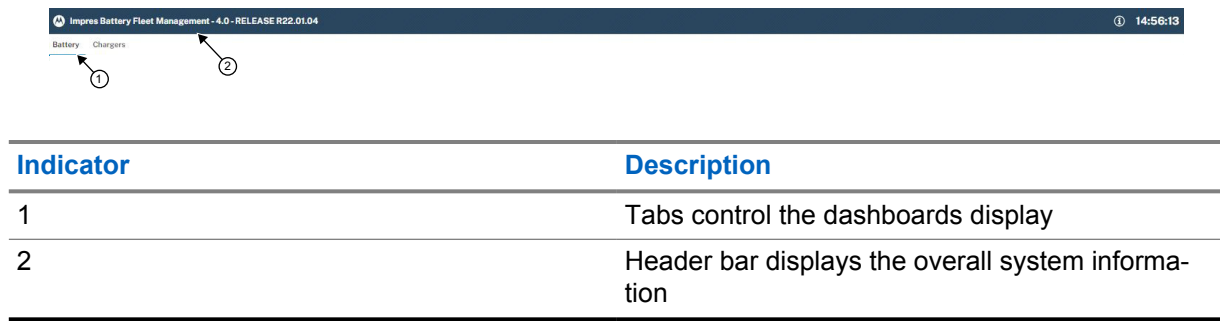


In the diagram, the original 3.5.x components with some enhancements remains unchanged. To support the web services, some new database front end applications were developed to communicate with the SQL EXPRESS services. A browser would visit the web server which could be the Internet Information Services (IIS) web server. The actual web page application to be served is located in this server. Once the application is served to the browser, it executes on the browser environment and fetches the data stored in the front end.

1.2

Header Bar and Tabs

Figure 2: Header Bar and Tabs



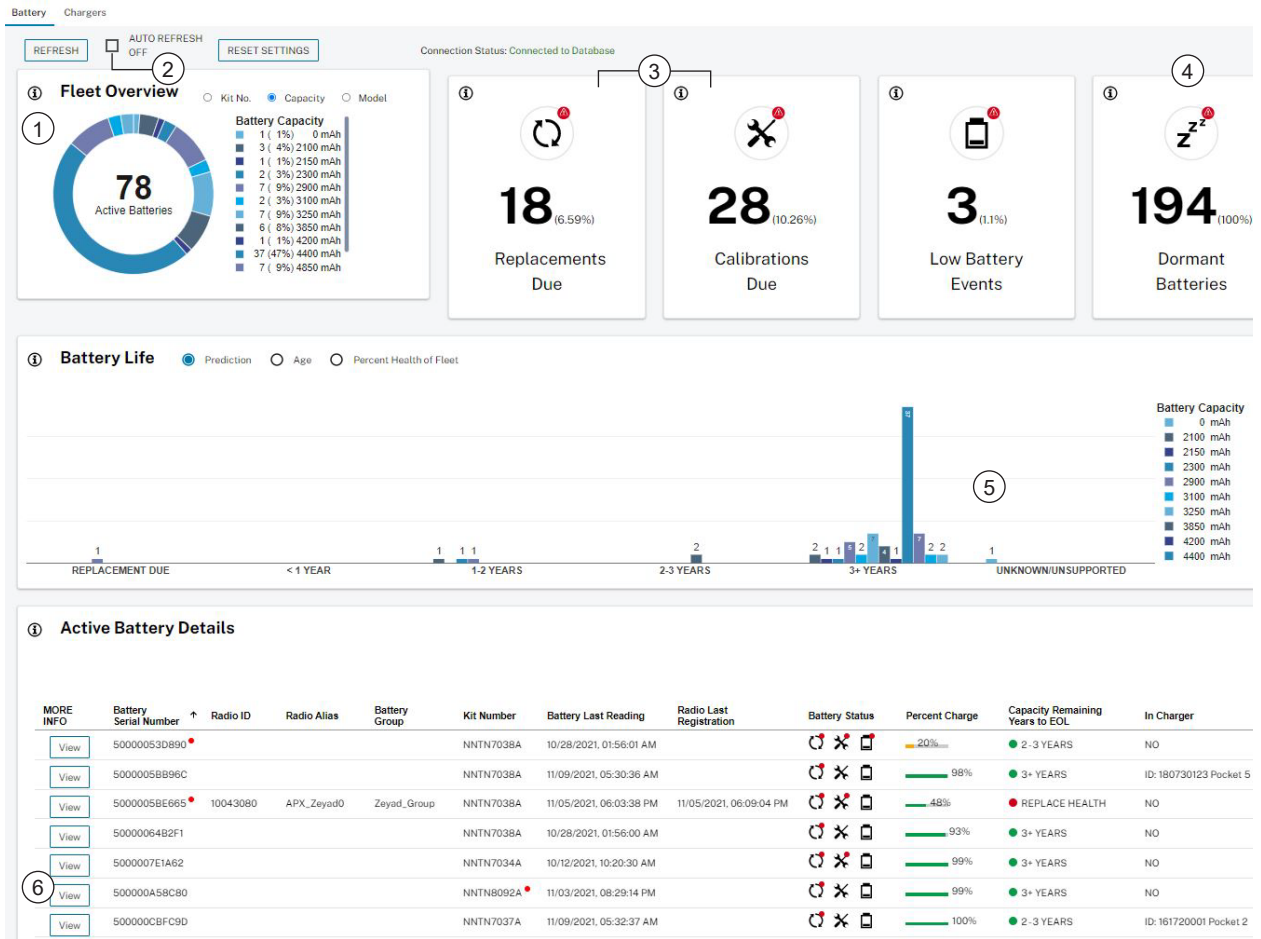
1.3

Radios and Batteries Dashboard

The main screen gives the fleet view and individual battery and associated radio if any.

The top of the screen is broken up into the general overall fleet information and the bottom half of the screen is a full report of all of the batteries in the system. The bottom table can be filtered using one of the four cards, the filter, or search panel.

Figure 3: Dashboard



Indicator	Description
1	View fleet makeup.
2	Manual and auto refresh.
3	Breakdown of the fleet health status using the status cards.
4	Batteries that are not reported within the reporting criteria.
5	Breakdown by battery types and indicates the remaining life for each type.
6	List of individual batteries. Choosing one or more cards filters the table.

1.4 Chargers Dashboard

The charger screen shows a close to real time view of the chargers connected to the system.

Update interval is approximately five minutes. The chargers are displayed by the computer that is hosting the charger. The computer can be given an alias which could be used to indicate a building, room, or vehicle. Each charger attached to the client computer can also be given an alias to identify the

charger, example Column 1 row 4 or police #2. If the computer or the charger are not given an alias then the computer name and charger serial number is utilized.

Figure 4: Chargers Dashboard

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Battery Chargers

REFRESH AUTO REFRESH OFF

Charger Details

EDIT NAMES

KEY to LEDs: ● RAPID CHARGE ● CHARGE >90% ● CHARGE COMPLETE ● ATTENTION

● ERROR ● REPLACE ● CALIBRATE REQUIRED ● CALIBRATING ● HOT/COLD/LOW

HUB NAME	CHARGER NAME	POCKET 1	POCKET 2	POCKET 3	POCKET 4	POCKET 5	POCKET 6
CLEARCEN	NAME: LEFT_SIDE_FRONT SN/ID: 170550277	● 100% COMPLETE SN: 500001EDD7FE KIT: PMNN4494A 100% Rated: 4850 mAH	● 100% COMPLETE SN: 500001B989F7 KIT: PMNN4494A 100% Rated: 4850 mAH		● 100% COMPLETE SN: 50000202CA3E KIT: PMNN4504A 100% Rated: 3250 mAH	● 100% COMPLETE SN: 5000019CB38B KIT: PMNN4487A 100% Rated: 4500 mAH	
CLEARCEN	NAME: FUSION_APX_RIGHT_SID SN/ID: 180730123					● 100% COMPLETE SN: 50000058B96C KIT: NNTN7038A 100% Rated: 2900 mAH	
CLEARCEN	NAME: Motorola IMPRES GEN2 MUC Charging Hub SN/ID: 191620418	● CALIBRATE REQUIRED SN: 50000223EFF0 KIT: NNTN9087A 100% Rated: 3650 mAH			● 100% COMPLETE SN: 50000286F930 KIT: NNTN9216A 100% Rated: 4200 mAH	● CALIBRATE REQUIRED SN: 50000286F353 KIT: NNTN9216A 100% Rated: 4200 mAH	
CLEARCEN	NAME: Motorola IMPRES GEN2 MUC Charging Hub SN/ID: 191620431					● 100% COMPLETE SN: 50000287548A KIT: NNTN9216A 100% Rated: 4200 mAH	● 100% COMPLETE SN: 500002DEA850(Error) KIT: PMNN4812A 98% Rated: 3300 mAH
CLEARCEN	NAME: Motorola IMPRES GEN2 MUC Module SN/ID: 161720001	● 100% COMPLETE SN: 50000192FABC KIT: PMNN4487A 100% Rated: 4500 mAH	● 100% COMPLETE SN: 500000CBFC9D KIT: NNTN7037A 100% Rated: 2100 mAH	● CALIBRATE REQUIRED SN: 500001CC28BD KIT: PMNN4487A 100% Rated: 4500 mAH	● 100% COMPLETE SN: 500001645993 KIT: NNTN8921A 100% Rated: 4400 mAH	● BATTERY ERROR SN: 50000104813C(Error) KIT: NNTN8921A 89% Rated: 4400 mAH	● 100% COMPLETE SN: 500001C32B54 KIT: PMNN4487A 99% Rated: 4500 mAH
OFFLINE CLEARCEN	OFFLINE NAME: SN/ID: 1&2B53A856&0&180730123						
OFFLINE CLEARCEN	OFFLINE NAME: SN/ID: 1&2B53A856&0&170550277						
OFFLINE CLEARCEN	OFFLINE NAME: SN/ID: 191620418						
OFFLINE CLEARCEN	OFFLINE NAME: SN/ID: 161720001						

Indicator	Description
1	Manual and auto refresh
2	To change the name of a computer or charger
3	Highlighted boxes indicate that user interaction is required
4	Charger or computer is offline

1.4.1

Charger Errors

Each charger screen can show which batteries are connected to the charger. Batteries are updated to their particular pockets. Some battery details are shown in their pockets including battery error.

Figure 5: Errors

HUB NAME	CHARGER NAME	POCKET 1	POCKET 2	POCKET 3	POCKET 4	POCKET 5	POCKET 6
BFM-4-BMAX1	NAME: Motorola IMPRES GEN2 MUC Charging Hub SN/ID: 18201203	BATTERY ERROR SN: 500002239E87A(Error) KIT: NNTN9087A 100% Rated: 3650 mAh	CALIBRATING SN: 500002203E86A(Error) KIT: NNTN9089A 98% Rated: 5650 mAh	BATTERY ERROR SN: 500002238A35A(Error) KIT: NNTN9087A 100% Rated: 3800 mAh	CALIBRATING SN: 500002238041 KIT: NNTN9089A 96% Rated: 5650 mAh	CALIBRATING SN: 50000223036C KIT: NNTN9089A 99% Rated: 5550 mAh	CALIBRATING SN: 500002E0153B KIT: PMNN4482A 99% Rated: 3300 mAh

Indicator	Description
1	Battery Memory Error

1.4.2

Editing Computer and Charger Name

Procedure:

- To change the name of a charger click on **EDIT NAMES** button.
The screen displays the names in the edit boxes with set buttons next to them.
- To exit from the Edit Names mode, click on **EDIT NAMES** button again.
The charger name text changes to default read only and the set button disappears.

Indicator	Description
1	To enter or exit edit name function for computer or charger
2	Text box for computer name
3	Set computer name
4	Text box for charger name
5	Set charger name

Chapter 2

The Fleet Overview Donut Chart

The fleet overview donut chart allows you to view the battery data in relation to the type of batteries in the fleet.

2.1

Choosing Donut Chart Data Type

The battery information can be displayed by selecting Kit No, Capacity, and Model chart data type.

Figure 6: Kit No.

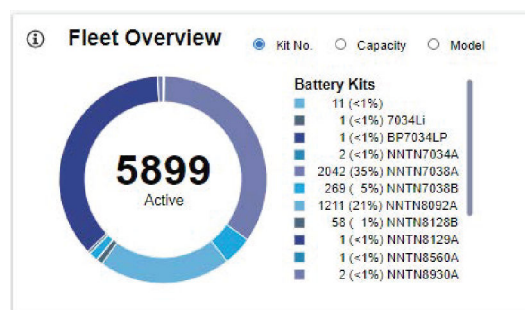


Figure 7: Capacity

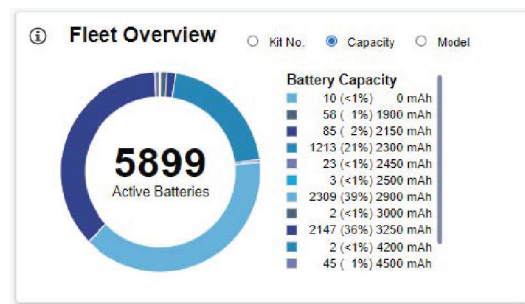
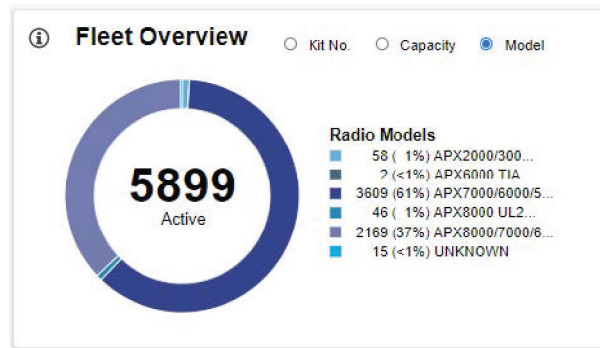


Figure 8: Model



NOTE:

Each data type displays a different histogram bar chart.

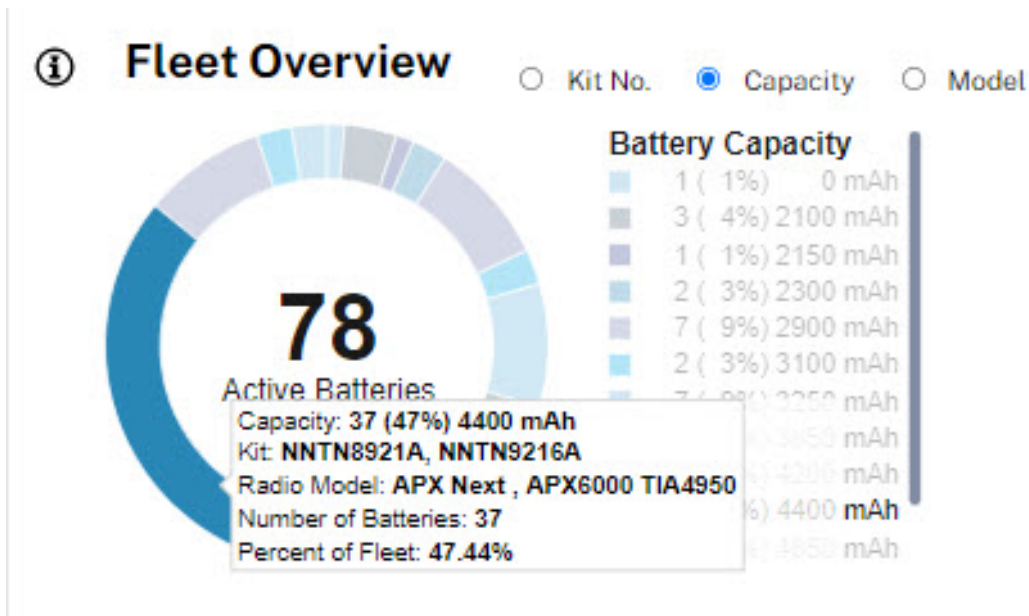
Model chart type does not show the actual radio but the list of models that the battery can be used with. For example, APX 8000/7000 does not mean that the battery is connected to an APX 8000. It indicates the battery can be used with an APX 8000 or APX 7000 model radio.

2.2

Hovering over a slice of the Donut

Procedure:

For more details on the donut slices, hover the mouse over a slice of the donut.



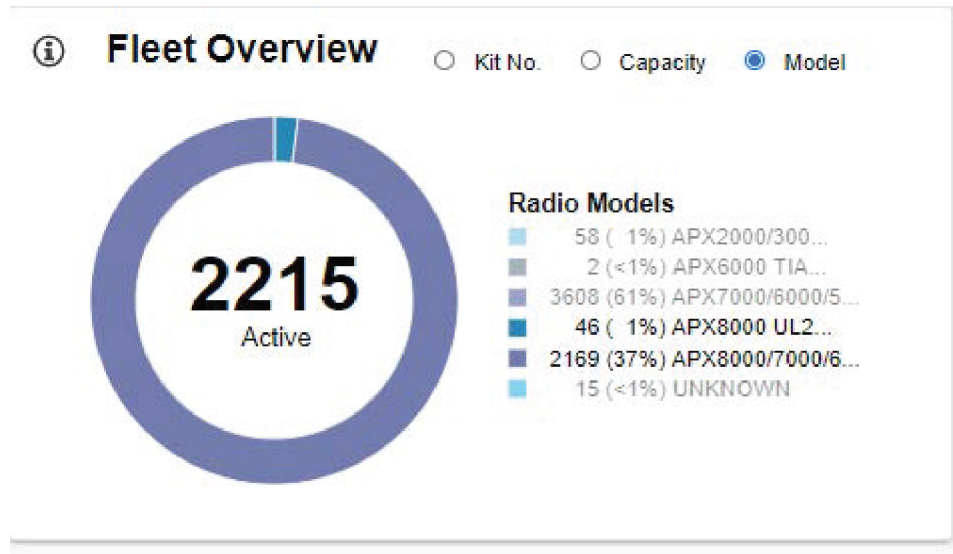
The screen displays the information.

2.3 Selecting Donut Data

Procedure:

Click on each of the legend for information on the set of batteries that is applicable to the radio model.

Figure 9: Select Donut Data



To select a particular radio model, double-click on a legend. To re-select all the legend entries, double-click again.

Chapter 3

Cards

Cards displays total battery information and can be used to filter the main battery table.



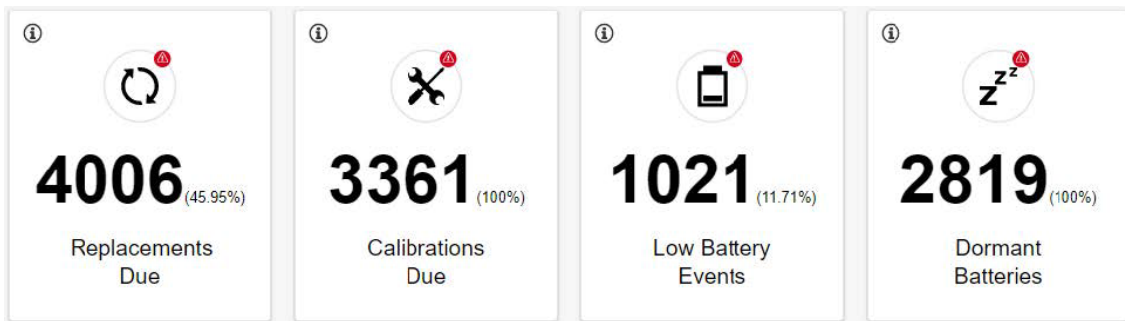
NOTE: The cards affects the content of the Battery Details table and does not change the content of the donut chart, life, or age prediction histogram bar chart.

3.1

No Cards Selected

When no cards are selected, the battery table displays all active batteries.

Figure 10: No Cards Selected



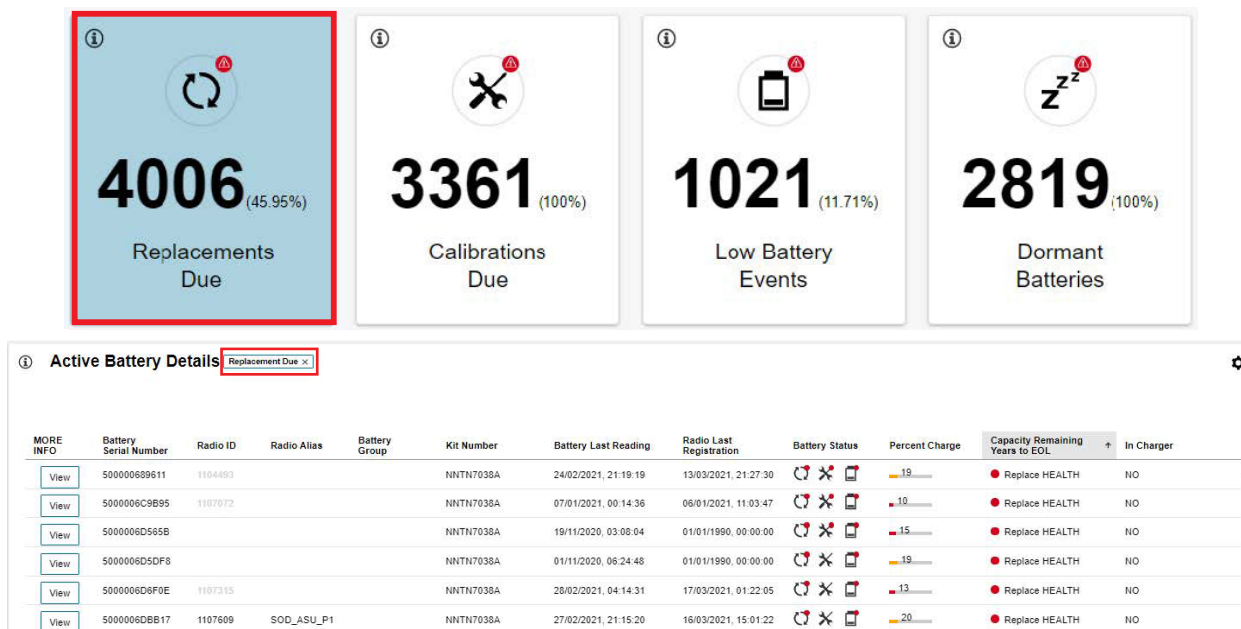
Each card indicates the total batteries within the category.

3.2

One Card Selected

The battery table displays the details of the selected card.

Figure 11: One Card Selected



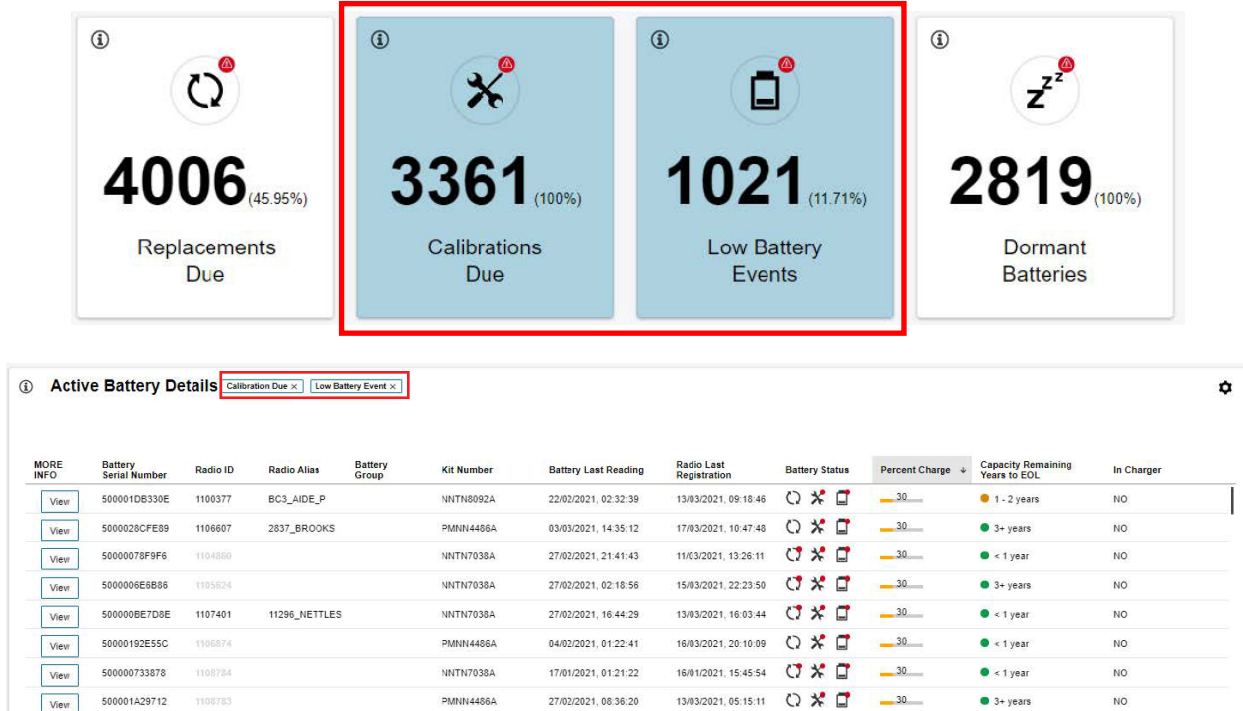
For example when the **Replacements Due** card is selected, the battery table shows the number of batteries that need to be replaced.

3.3

Multiple Cards Selected

The battery table displays the details of all the selected cards when multiple cards are selected.

Figure 12: Multiple Cards



For example, when the **Calibration Required** and **Low Battery Events** cards are selected, the battery table shows the number of batteries with low battery charge and need calibration.



NOTE: Calibration due and low battery event is flagged next to the title in the Battery Details table.

3.4

The Dormant Battery Card

The dormant battery card is a special case whereby selecting this card changes the donut and the bar chart to show the number of dormant batteries. The battery table displays only the batteries that are dormant.

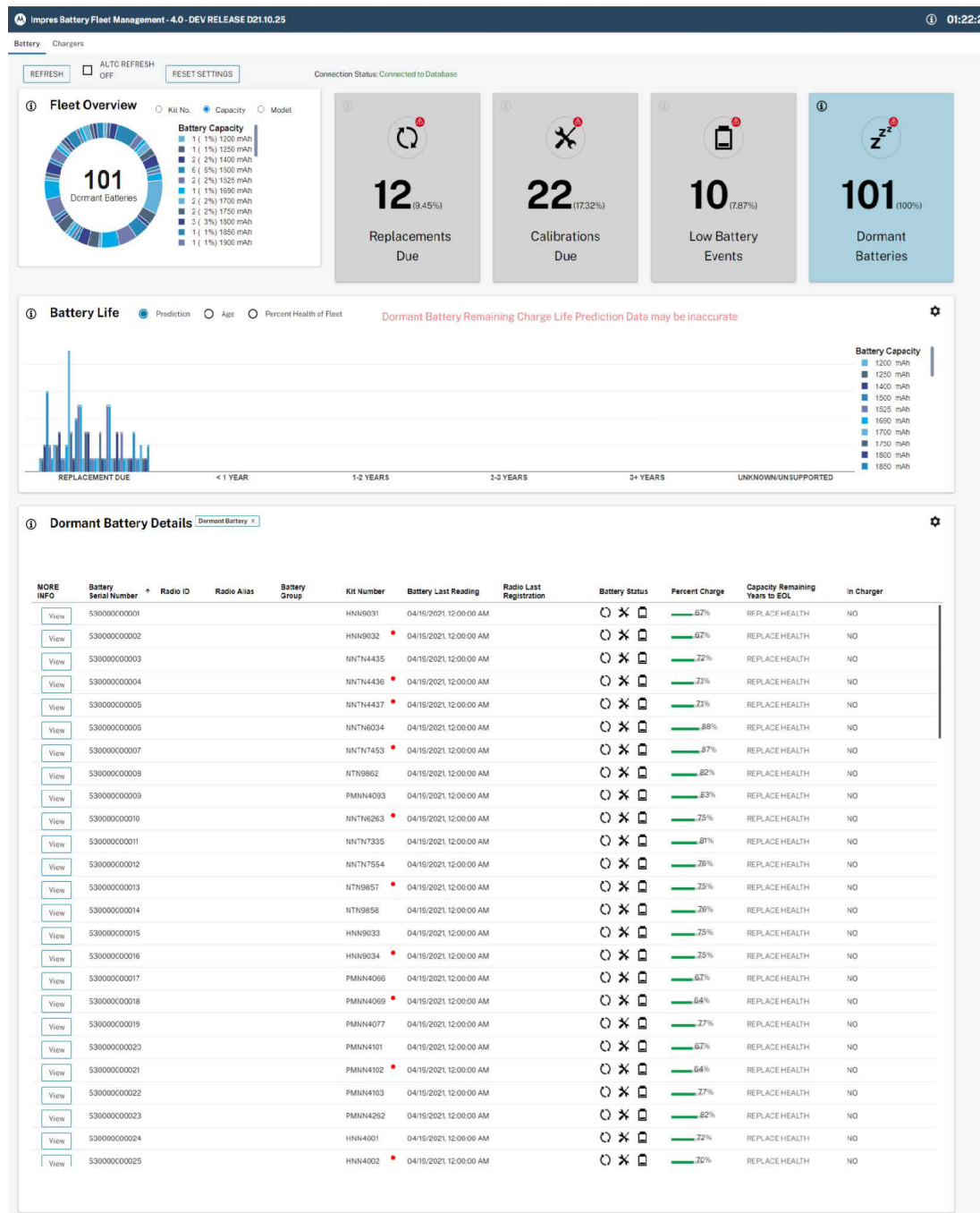
When the dormant battery card is selected, the histogram bar chart and other cards are not selectable under the presumption that if the battery is dormant, other data are meaningless. Other cards and bar chart are disabled when dormant battery card is selected.



NOTE: The battery table changes to Dormant Battery Details and the content display only dormant batteries.

When a Dormant card is selected, some fields in the battery table are grayed out or marked unavailable.

Figure 13: Dormant Battery



Chapter 4

Histogram Bar Chart

The histogram chart displays the health or the age of the fleet.

- Health - A condition whereby the battery is capable of reaching a minimum charge threshold that is considered the minimum charge (to last what is defined as a standard shift). Once a battery percentage falls below the minimum charge threshold, the battery needs to be replaced.
- Age - While a battery can be considered healthy for the ability to recharge at the minimal level, age could be a consideration to prevent batteries that may have hidden damage or crack in the case.

The Donut chart can display 3 types of data:

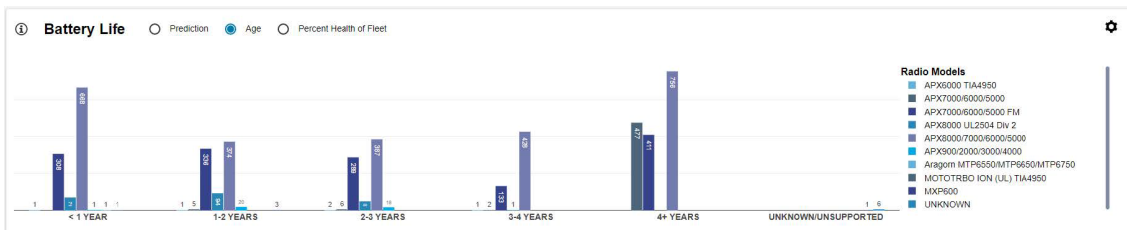
- Kit No
- Capacity
- Radio Model Type

To change the data type, choose one of the three types and the histogram bar chart changes accordingly.

4.1

Bar Chart By Radio Model and by Age in Field

Figure 14: Bar Chart By Radio Model and by Age in Field



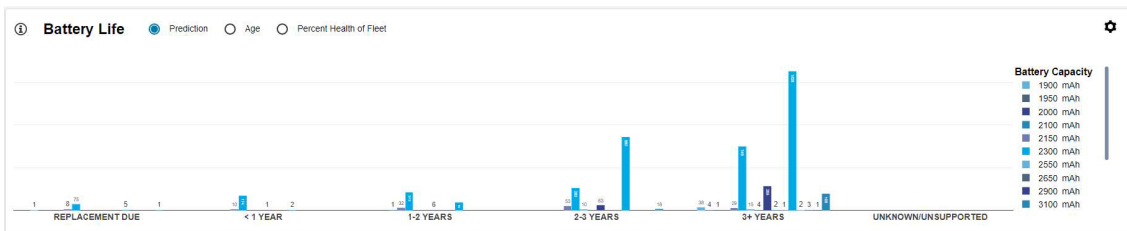
4.2

Bar Chart By Capacity and Prediction of Charge Life

The bar chart indicates the batteries by their relative ability to reach the minimum required charge for a shift.

The batteries that are in the category of less than one year are close to falling below this value. The batteries in the replacement due are already at or below the minimum value.

Figure 15: Bar Chart By Capacity and Prediction of Charge Life



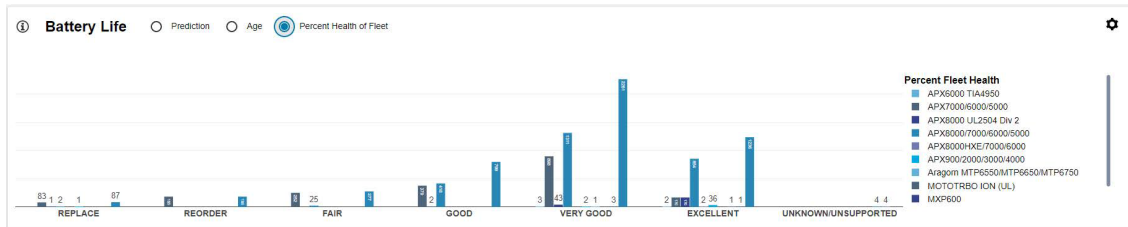
4.3

Bar Chart By Percent Health

The bar chart indicates the batteries by their relative ability to reach the minimum required charge for a shift as a percentage.

The baseline percentage is 60 %. Consider replacing the batteries below this percentage.

Figure 16: Bar Chart By Percent Health



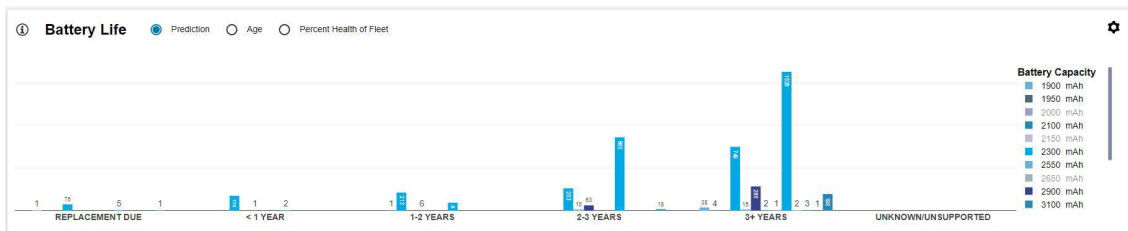
4.4

Bar Chart Selected Data

Selecting an item from the legend removes the item from the chart. Double clicking the item selects one item or enable all legend items again.

In the following example, some of the battery capacity types are eliminated to view other information.

Figure 17: Bar Chart Selected Data



4.5

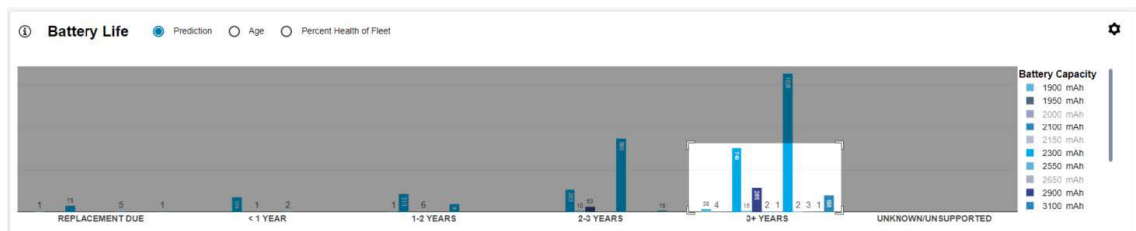
Bar Chart Zooming

When and where to use: This features allows you to zoom into the chart. Zooming feature helps you to view the set of bars that may be small.

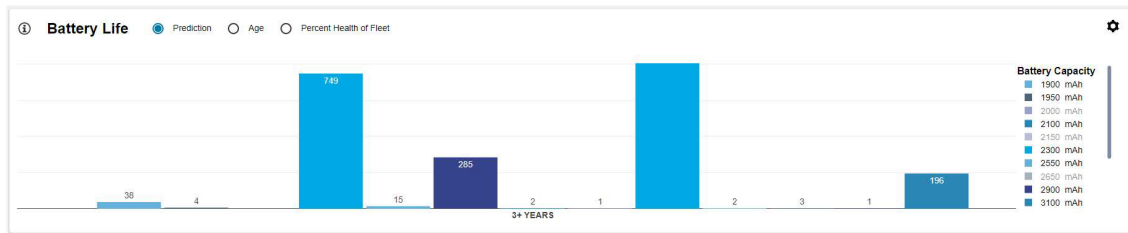
Procedure:

- 1 To zoom in the bars, draw a box using the mouse around a set of bars.

Figure 18: Bar Chart Zooming



The selected bar chart is zoomed when releasing the mouse.



- 2 To zoom out and return to full size, double click in an open area of the bar chart.

4.6

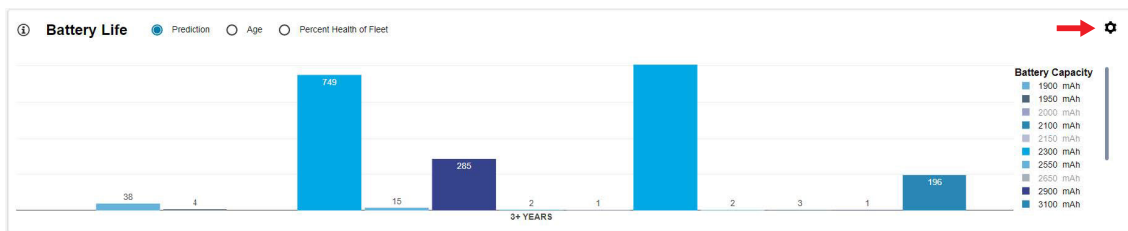
Hiding the Bar Chart

When and where to use: This feature allows you to hide the bar chart.

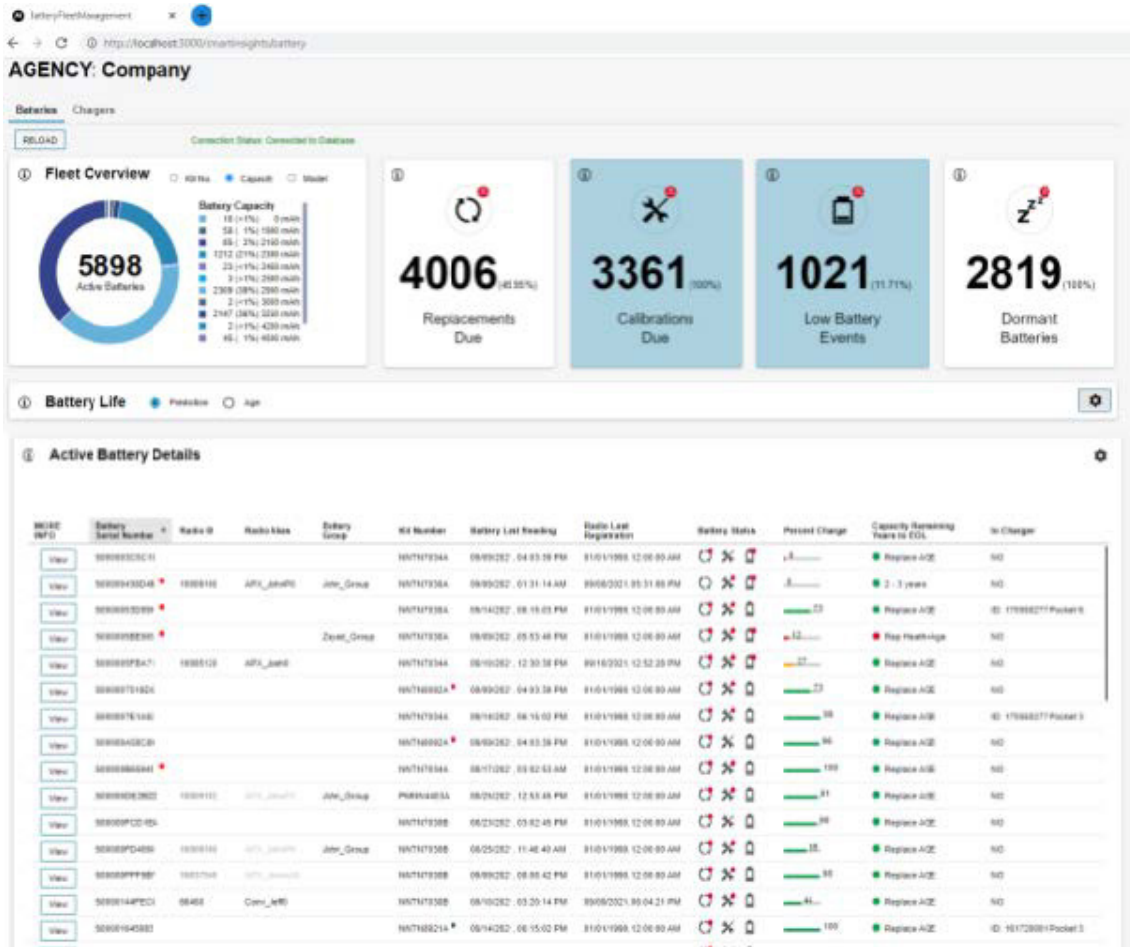
Procedure:

- 1 To hide the bar chart, click on the **Gear** icon in the upper right hand corner of the bar chart box.

Figure 19: Hiding the Bar Chart



When the gear is selected, the bar chart collapses and the main screen shows the following display.



2 To see the bar chart again, click on the **Gear** and the bar chart expands to full size.

Chapter 5

The Battery Details Table

The details table shows all the batteries in the fleet. Currently the table shows the Active batteries or the Dormant batteries depending on the selection of the dormant card.

When the dormant card is not selected, the table may also be augmented by the other cards to only show active batteries. The table displays the active batteries details that meet the conditions of the other cards that are selected such as Recondition Required and Low Battery Event.

The battery detail table supports a detailed view of an individual battery by clicking on the **View**, **Search**, or **Radio Data** button if Over-the-Air (OTA) is enabled and functioning. The columns can be sorted by clicking on the column title.

5.1

Show or Hide Search and other buttons

The gear icon in the upper right corner allows you to expand the top region to show extra buttons and check boxes that can be used for searching, printing, exporting, or hiding data in the table.

The screenshot shows the 'Active Battery Details' form. At the top right, a gear icon is highlighted with a red arrow. The form contains several sections: 'SAVE AS CSV' and 'PRINT PURCHASE REPORT' buttons; checkboxes for 'HIDE RADIO DATA', 'SHOW INACTIVE BATTERIES', and 'HIDE UNREPORTED BATTERIES' (which is checked); and a search section with fields for 'BATTERY SERIAL NUMBER-FROM', 'TO', 'RADIO ID-FROM', 'TO', 'KIT NUMBER-CONTAINS', 'MODEL-CONTAINS', 'BATTERY GROUP' (set to 'None'), 'INTRINSICS' (with checkboxes for FM, TIA, UL), 'HEALTH: PREDICTION' (set to 'ALL'), and 'AGE IN YEARS' (set to 'ALL'). There are 'Search' and 'CLEAR' buttons at the bottom of the search section. Below the form is a table with columns: MORE INFO, Battery Serial Number, Radio ID, Radio Alias, Battery Group, Kit Number, Battery Last Reading, Radio Last Registration, Battery Status, Percent Charge, Capacity Remaining Years to EOL, and In Charger. The first row of data shows a battery with serial number 5000003CSC18 and kit number NNTN7034A.

5.2

Hiding Radio Data

Without Over-the-Air (OTA) setup, the radio data is of no use and can be hidden. Even with OTA, clicking on the check box rearrange, remove, or add columns to the table that do not include radio data.

This screenshot is similar to the previous one, but the 'HIDE RADIO DATA' checkbox is highlighted with a red box. The gear icon in the top right corner is also visible.



NOTE: When displaying radio data, there is a **HIDE UNKNOWN** batteries check box that hides the radios that have not reported battery data.

5.3

Battery Table Column Details

The following table describes each of the columns in the battery table.












NOTE:

If a column reports **NOT SUPPORTED**, **UNKNOWN**, or **GHOSTED**, the battery dormant state cannot report this field or a radio is reporting that it is registered but has not reported its battery data. The latter is indicated by the kit number containing **UNKNOWN** value.

Non-IMPRES batteries do not have a kit number and are not able to report over the radio network.

Table 1: Battery Table Column Details

Column Title	Description	
MORE INFO	View button	Opens up a dialog box with more details about the specific battery.
Battery Serial Number	The serial number of the battery	<p>A Red dot next to a serial number indicates that the battery has had a memory error recorded some time in the past. May be non-fatal.</p> <p>If the value in the battery serial number field is equal to NOT REPORTED, then a radio has connected to IMW but has not sent in battery information or is not programmed to send battery information.</p>
Radio ID	ID of the radio associated with this battery	If the radio is not connected, the value is displayed in light-gray to indicate this was the last known radio connected to this battery.
Radio Alias	User Assigned Alias	<p>This is an assigned alias from the following systems:</p> <ul style="list-style-type: none"> Unified Network Services (UNS) or Intelligent Middleware (IMW) Motorola Network Interface Service (MNIS)
Battery Group	User Assigned Group	To sort or search by battery group in the table, you can assign a Maintenance group in the Battery Fleet Management (BFM) App or Dept2 to a set of batteries.
Intrinsic Type	The type of certification supported by the battery	TIA4950
		UL 2504 DIV2
		CSA157
		FM
		ATEX
Kit Number	The Model Number of the battery	<p>If the Kit Number displays UNKNOWN:</p> <ul style="list-style-type: none"> Not an IMPRES battery. The radio has not reported the battery that is connected to it.

Column Title	Description	
		<ul style="list-style-type: none"> The radio is not enabled to report battery data.
	PMNN4804A 	A Green dot next to the kit number indicates TIA 4950 intrinsic type.
	PMNN4803A 	A Blue dot next to the kit number indicates UL 2504 DIV2 intrinsic type.
	PMNN4803A 	An Orange dot next to the kit number indicates CSA157 intrinsic type.
	PMNN4803A 	A Red dot next to the kit number indicates FM intrinsic type.
	PMNN4803A 	A Purple dot next to the kit number indicates ATEX intrinsic type.
	PMNN4803A 	A Silver dot next to the kit number indicates NFPA intrinsic type.
Battery Last Reading	The last time the battery data was read	The last reading can be delivered either from a connected charger or from a radio sending Over-the-Air (OTA).
Radio Last Registration	The last time the radio registered with the system	A radio must register before sending battery data. The radio does not send battery data immediately after registering.
Battery Status	 Replacement Due	A red dot on this icon indicates that the battery must be replaced.
	 Calibration Due	A red dot on this icon indicates that the battery must be calibrated or conditioned.
	 Low Battery Event	A red dot on this icon indicates that the battery is in a low charge state.
Percent Charge	This is the actual charge from last battery read	The percentage is based on the capacity remaining not the rated capacity.
Capacity Remaining/Percent Health	This indicates the battery health as a green, orange, or red dot.	The age next to the dot is the remaining years left. It is a combination of age and health.
In Charger	This indicates if the battery is in a charger and indicates which charger and which Pocket it is located in	You can assign a charger Alias but if charger Alias is not assigned, the table displays the charger ID.
Chemistry	Type of chemistry in the battery	LI-ION : Lithium Ion
		NICD : Nickel Cadmium
		NIMH: Nickel Metal Hydride
Status	Battery status	Status to indicate the battery is active, inactive, or dormant.
		Active batteries-in usage.

Column Title	Description
	Inactive batteries-taken out of service.
	Dormant batteries-battery data in database is older than the system preference.
Radio Family	Indicated the battery Radio Family A Radio Family is a group of radio models that the battery is designed to be used with.

5.4

Show Inactive Batteries

Inactive batteries are batteries that are taken out of service. By default the system retains the data for 60 months and then begin to delete batteries over that age to free up storage in the database.

You can view the inactive batteries by selecting the checkbox. The table displays only inactive batteries.

Figure 20: Inactive Batteries

① Active Battery Details ⚙

SAVE AS CSV

PRINT REORDER REPORT

☐ HIDE RADIO DATA
 ☒ SHOW INACTIVE BATTERIES
 ☐ HIDE UNREPORTED BATTERIES

BATTERY SERIAL NUMBER- FROM: TO:

RADIO ID- FROM: TO:

KIT NUMBER- CONTAINS:

MODEL- CONTAINS:

BATTERY GROUP:

INTRINSICS ☐ FM ☐ TIA ☐ UL

HEALTH: PREDICTION AGE IN YEARS

Search

CLEAR

MORE INFO	Battery Serial Number	Radio ID	Radio Alias	Battery Group	Kit Number	Battery Last Reading	Radio Last Registration	Battery Status	Percent Charge	Capacity Remaining Years to EOL	In Charger
View	500002B00C41				PLMNN4503A	11/25/2021, 05:11:23 PM			0%	REPLACE HEALTH	NO

5.5

Advanced Searching

This feature allows you to search for data in the table based on the content of the columns in the table.

You can search on a range of battery serial numbers, range of radio IDs, or by selecting a specific Battery Group.



NOTE: A Battery Group is a user defined tag that can be associated with a battery. This can be used to find all batteries in that group. For example, a group name can be the name of a department, organization, or others.

5.6

Battery Table More Info View Button

This feature allows you to view details about the individual battery. The table displays the radio details and a detailed section.

If Over-the-Air (OTA) is enabled, the radio section displays information about the radio and the associated battery. You can click on **MANUAL REQ** button when a radio status shows **ACTIVE** on the system. A request to read the battery is generated to ask the system to fetch the battery data.

In the **Battery Details** section, you can change the battery group by choosing the group button. A list of the available group names is displayed. Choosing a group name from the list assigns the battery to that group.



NOTE:

You can creation a group name through the PC Application and it can only be selected in the web application.

After changing the group, the update to the server happens. If the web page is refreshed before the server is updated, the previous information is displayed. It takes about 60 seconds to update the server. Refresh or reload the page after 1 minute to view the changes.

EXTENDED RADIO AND BATTERY DATA

Close

Radio Details

MANUAL REQ	Radio ID	Radio Alias	Last Registration Date	Request Status
NO RADIO				

Battery Details

Serial Number:	5000024AEA44	Kit Number:	PMNN4804A	Chemistry:	LI-ION
Group Name:	NONE	Status:	ACTIVE	Date of Last Read	11/26/2021, 05:12:36 PM ASIA/KUALA_LUMPUR
Radio Family:	MOTOTRBO ION (UL)	Intrinsic Types	TIA4950	Date of Manufacture	08/06/2021, 12:00:00 AM ASIA/KUALA_LUMPUR
Date of First Use	08/07/2021, 12:00:00 AM ASIA/KUALA_LUMPUR	Days Since Last Calibration	40	Days Until Next Calibration	0
Rated Capacity (mAh)	2900	Potential Capacity (mAh)	3000	Present Charge (mAh)	<div style="width: 93%; height: 10px; background: linear-gradient(to right, #28a745, #6c757d);"></div> 93%
Percent Health Remaining	<div style="width: 100%; height: 10px; background-color: #28a745;"></div> 105%	Age of Battery in Years	< 1	Recommendations:	RECONDITION / CALIBRATE BATTERY
Total Calibration Cycles	4	Total Impres Charge Cycles	27	Days Since Last Remove From Impres Charger	0
Total Est Non-Impres Charge Cycles	0				

Charger Details

Currently in a Charger	NO	HUB DEVICE:	WXTH78-840G6	Charger Name/SN:	MOTOROLA IMPRES GEN2 BOC MODULE (ID: 201360051)	Pocket Number:	1
Charger Version:	B21.09	Storage Mode:	DISABLED	Calibration Enabled:	ENABLED	EOS Enabled:	ENABLED
Charger LED Status:	STEADY RED	Battery State:	CHARGING	Battery Voltage	8.49V	Battery TEMP	97.52F / 36.40C

Chapter 6

Report Generation and Exporting

This feature allows you to generate and export reports.

6.1

Save the Report As CSV

This feature allows you to export the data in the battery table to a spreadsheet.

Figure 21: Saving Report

Files, Batteries, Report, Edit, View - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

Arial 10 B U

L36

A	B	C	D	E	F	G	H	I	J	K	L	M	
BATTERY DATA SAVED FROM FLEET MGMT WEB APP													
1	2	3	4	5	6	7	8	9	10	11	12	13	
batterySerialNo	kitNumber	deviceId	date_utc	currentCapacity_pct	status	ageInYears	grpCapacity	battLifePred	deviceAlias	deviceType	replacementRequired	calibrationRequired	lowBatt
500002154CA9	NNTN9087A	unknown	2021-04-26T12:41:06.273Z	97.7368421053	active	betweenTwoandTh	3800	threePlusYears	APX Next	0	1		
500002203BE6	NNTN9087A	unknown	2021-04-26T12:41:04.673Z	96.3157894737	active	betweenTwoandTh	3800	threePlusYears	APX Next	0	1		
500002201FF4	NNTN9087A	unknown	2021-04-26T12:41:02.657Z	98.7894736842	active	betweenTwoandTh	3800	threePlusYears	APX Next	0	1		
50000223F162	NNTN9087A	unknown	2021-04-22T22:49:31.053Z	94.4109589041	active	betweenOneandTw	3650	threePlusYears	APX Next	0	0		
500002239E58	NNTN9087A	unknown	2021-04-22T22:49:30.607Z	92.6315789474	active	betweenOneandTw	3800	threePlusYears	APX Next	0	0		
50000240B934	NNTN9085A	unknown	2021-04-22T22:49:30.353Z	100.4864664065	active	betweenOneandTw	5550	threePlusYears	UNKNOWN	0	1		
50000002E3D02	PMNN4483A	unknown	2021-04-21T22:34:38.190Z	84.6046611628	active	overFourYears	2150	underOneyear	APX7000/6000/5000	1	0		
5000018468A2	NNTN703EB	unknown	2021-04-21T22:34:38.923Z	97.8620689655	active	overFourYears	2900	threePlusYears	APX7000/6000/5000	0	1		
5000010747EF	PMNN4485A	unknown	2021-04-21T22:34:38.447Z	97.5384615385	active	betweenThreeandP	3250	threePlusYears	APX8000/7000/6000/5000	0	1		
500001A28B19	PMNN4485A	481CNR4294	2021-03-17T13:58:33.703Z	109.5692307692	active	overFourYears	3250	threePlusYears	DFHV_MENA	0	1		
500001A26743	PMNN4485A	481CNR3913	2021-03-17T13:51:59.823Z	90	active	overFourYears	3250	threePlusYears	APX7000/6000/5000	0	1		
50000225133E	NNTN812EB	426CUT2470	2021-03-17T13:33:28.110Z	112.6842105263	active	betweenTwoandTh	1900	threePlusYears	DFHV-BENSON_15	0	0		
500001A1A84C	PMNN4485A	655CLT0713	2021-03-17T13:24:08.823Z	93.2	active	overFourYears	3250	threePlusYears	2154_EARNARD	0	0		
50000106E2C8	NNTN703EB	481CNR4462	2021-03-17T13:22:45.633Z	92.1724137931	active	overFourYears	2900	threePlusYears	E532_PHILLIPS	1	1		
5000010B54E0	NNTN8092A	756CQK1330	2021-03-17T13:08:42.623Z	71.3913043478	active	betweenThreeandP	2300	betweenTwoandT	E30_LINE	0	0		
500001A29699	PMNN4485A	481CVR0851	2021-03-17T13:06:47.343Z	101.0461538462	active	overFourYears	3250	threePlusYears	DFS_P59	0	1		
5000010BDECE6	PMNN4485A	481CNR4014	2021-03-17T13:02:56.840Z	110.8615384615	active	overFourYears	3250	threePlusYears	8554_EROOKS	0	1		
50000106E2C2	PMNN4485A	481CMT0806	2021-03-17T12:50:38.113Z	94.8	active	betweenThreeandP	3250	threePlusYears	3095_MILES	0	0		
50000107D1786	NNTN8092A	756CQK1249	2021-03-17T12:44:49.267Z	76.8695652174	active	overFourYears	2300	betweenTwoandT	E14_LAYOUT	0	1		
50000000E01E2	NNTN703EA	655CLT0502	2021-03-17T12:44:16.187Z	65.6206896552	active	overFourYears	2900	betweenOneandTw	3465_CARTER	1	1		
5000021540DF	NNTN8092A	756CQK1348	2021-03-17T12:42:54.013Z	96.0869565217	active	betweenTwoandTh	2300	threePlusYears	T12_HOOK	0	1		
5000010660FE	NNTN8092A	756CQK1653	2021-03-17T12:42:05.890Z	76.8652171391	active	overFourYears	2300	betweenTwoandT	E11_WD	1	0		
5000013379F7	NNTN8092A	756CQK1528	2021-03-17T12:32:32.600Z	70.6086956522	active	overFourYears	2300	betweenTwoandT	FOC_LOANER_P21	1	1		
5000021515A8	NNTN8092A	756CQK1583	2021-03-17T12:32:01.147Z	109.5652173913	active	betweenTwoandTh	2300	threePlusYears	E23_OIC	0	1		
50000217E4A4	NNTN8092A	756CQK1280	2021-03-17T12:30:03.177Z	71.3913043478	active	betweenTwoandTh	2300	betweenTwoandT	GC3_P3	0	0		
5000010BDC5C	PMNN4485A	655CLT2543	2021-03-17T12:28:09.343Z	93.4153846154	active	betweenOneandTw	3250	threePlusYears	3832_FALMER	0	0		

6.2

Reordering Report

When and where to use: This feature allows you to generate a list of kit numbers needed for reordering batteries that no longer meet the health or age criteria.

Procedure:

A dialog appears to show the order to be placed. Click on the **PRINT** button. to print or generate a PDF file.

Do one of the followings when the report is generated:

- Print
- Generate a PDF file
- Save as a .CSV file to import to a spreadsheet

Figure 22: Reorder Report

PRINT REORDER REPORT

CLOSE
PRINT
EXPORT

BATTERY PURCHASE REPORT

KIT NUMBER	RADIO FAMILY	CHEMISTRY	FM ①	TIA4950 ①	UL2504 DIV 2 ①	CSA157 ①	ATEX ①	RATED CAPACITY	QUANTITY
	UNKNOWN	UNKNOWN						0 MAh	47
HNN9028	HT/GP/PRO Series	NiCd						1500 MAh	1
NNTN7033A	APX7000/6000/5000	Li-Ion	YES					4100 MAh	5
NNTN7034	APX7000/6000/5000	Li-Ion						4200 MAh	1
NNTN7034A	APX7000/6000/5000	Li-Ion						4200 MAh	5
NNTN7036A	APX7000/6000/5000	NIMH	YES					2000 MAh	1
NNTN7038A	APX7000/6000/5000	Li-Ion						2900 MAh	3694
NNTN7038B	APX7000/6000/5000	Li-Ion						2900 MAh	438
NNTN7453	XTS 5000/3500/3000	Li-Ion	YES					3950 MAh	1
NNTN7573A	APX7000/6000/5000	NIMH						2100 MAh	1
NNTN8092A	APX7000/6000/5000	Li-Ion	YES					2300 MAh	498
NNTN8128B	APX900/2000/3000/4000	Li-Ion						1900 MAh	2
NNTN8386	MOTOTRBO EnhancedTier/EntryTier CSA	Li-Ion				YES		1800 MAh	1
NNTN8560	APX4000/2000 / MOTOTRBO EnhancedTier	Li-Ion		YES				2500 MAh	1
NNTN8570	MTP8000Ex/MTP8550Ex	Li-Ion					YES	1200 MAh	1
PMNN4069	MOTOTRBO CoreTier	Li-Ion	YES					1400 MAh	1
PMNN4077	MOTOTRBO CoreTier	Li-Ion						2150 MAh	1
PMNN4101	MOTOTRBO CoreTier	Li-Ion						1500 MAh	1
PMNN4156	HT/GP/PRO Series	NIMH						2000 MAh	1
PMNN4403A	APX7000/6000/5000	Li-Ion						2150 MAh	172
PMNN4403B	APX7000/6000/5000	Li-Ion						2150 MAh	4
PMNN4486A	APX8000/7000/6000/5000	UNKNOWN						3250 MAh	11
PMNN4487A	APX8000/7000/6000/5000	Li-Ion						4850 MAh	1
PMNN4488	MOTOTRBO EnhancedTier/EntryTier	Li-Ion						3000 MAh	1
PMNN4505A	APX8000 UL2504 Div 2	Li-Ion			YES			4500 MAh	1

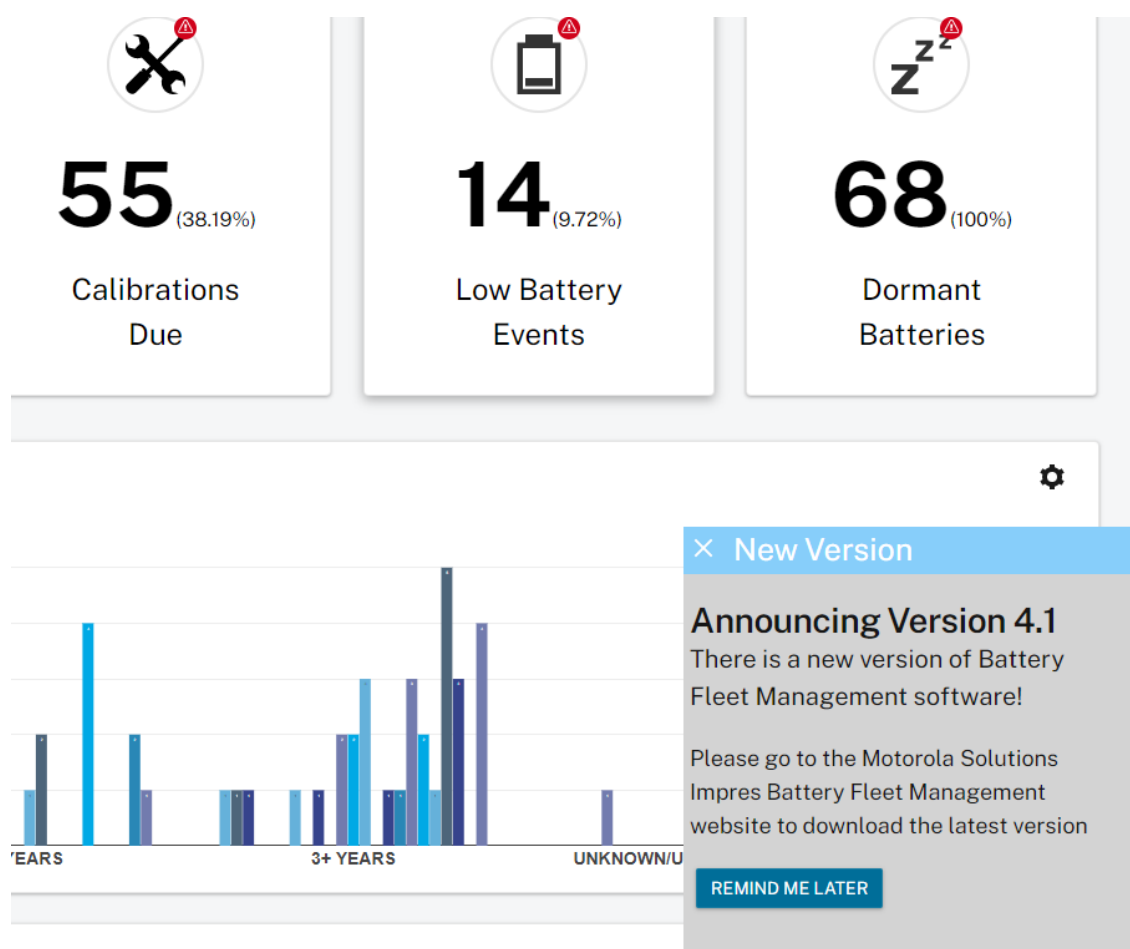
Chapter 7

Web Interface Update

The system checks the Motorola Solutions Battery Fleet Management periodically for Battery Fleet Management upgrade version when the web service is connected to internet.

If a new version is detected, the web interface display the new version notification after the next web screen refresh.

Figure 23: New Version Display



The notification disappears when you click on the X icon.

The notification closes for 5 days when you click on **REMIND ME LATER**.

A.1

Radio Details

Column Title	Descriptions
Manual Request	The radio sending manual request
Radio ID	This is the ID of the radio associated with this battery
Radio Alias	User Assigned Alias
Last Registration Date	The last time the radio registered with the system
Request Status	Status of the manual request

A.2

Battery Details

Column Title	Descriptions
Serial Number	The serial number of the battery
Kit Number	The Model Number of the battery
Chemistry	Type of chemistry in the battery
Group Name	User Assigned Group
Status	Status to indicate battery is active, inactive or dormant
Date of Last Read	The last time the battery data was read
Radio Family	The battery belongs to which Radio Family
Intrinsic Type	The type of certification supported by the battery (TIA4950,UL 2504 DIV2, CSA157, FM, ATEX)
Date of Manufacture	The date of the battery is manufactured
Date of First Use	The day when first inserted into an IMPRES Charger or used with an IMPRES Radio
Days Since Last Calibration	The date when the battery was last calibrated
Days Until Next Calibration	The next calibration date for the battery
Rated Capacity	The capacity the battery is rated for when sold as new
Potential Capacity	The capacity of the battery currently as it has aged
Present Charge	The current charge in the battery
Percent Health Remaining	This indicates the battery health as a green, orange or red dot
Age of Battery in Years	Battery age in unit year
Recommendations	Recommendation for the battery <ul style="list-style-type: none"> • No recommendations • Recondition/Calibrate Battery • Cool battery before charging • Warm battery before charging • Out of service life-Health • Out of service life-Age • Lost battery-Dormant battery
Total Calibration Cycles	Total number of cycles the battery has been calibrated
Total Impres Charge Cycles	Total number of cycles the battery has been inserted into an IMPRES charger
Days Since Last Removed from IMPRES Charger	The last day the battery was removed from the IMPRES charger
Total Estimated Non-IMPRES Charge Cycles	Total number of cycles the battery was charged in a Non-IMPRES charger

A.3

Charger Details

Column Title	Descriptions
Currently In a Charger	This indicates if the battery is in a charger and indicates which charger and POCKET it is located in.
Hub Device	The PC where the battery attached to a charger is connected to
Charger Name/SN	The charger name and serial number (ID) that the battery is attached to
Pocket Number	The pocket location where the battery is in a charger
Charger Version	The charger version where the battery is connected to
Storage Mode	Ship storage mode of the charger is enabled or disabled
Calibration Enabled	The calibration mode of the charger is enabled or disabled
EOS Enabled	The end of service life indication of the charger is enabled or disabled
Charger LED Status	The current charging status of the battery attached to the charger
Battery State	The current state of the battery
Battery Voltage	The battery voltage
Battery Temp	The battery temperature