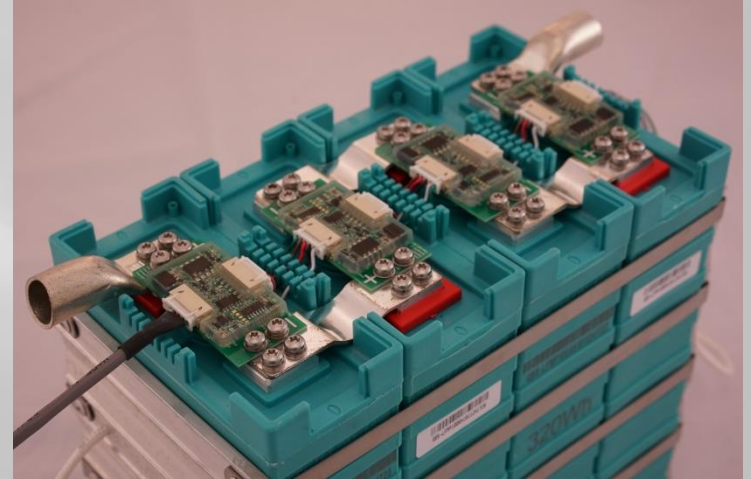




APP Features for

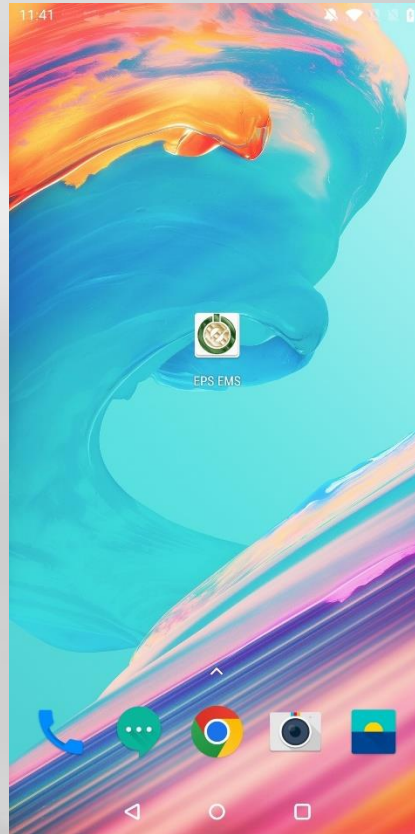
BMS System

March 2023

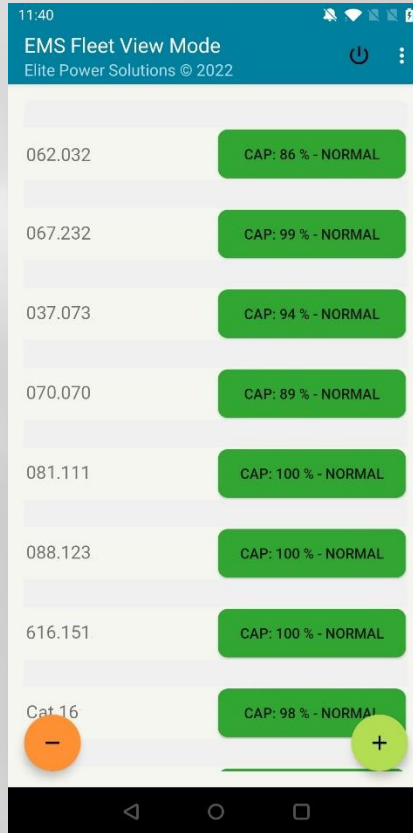


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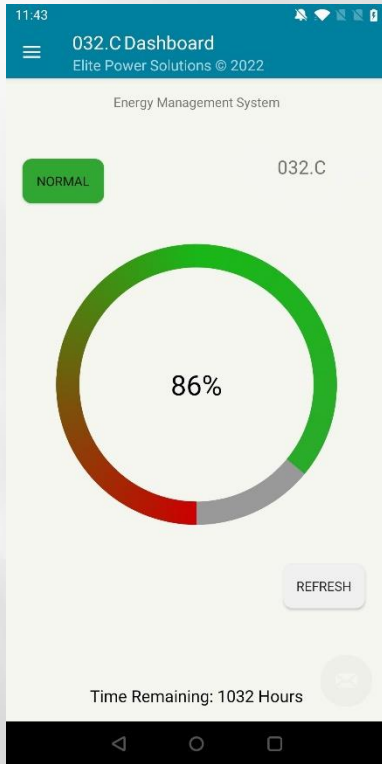
EPS APP For BMS System



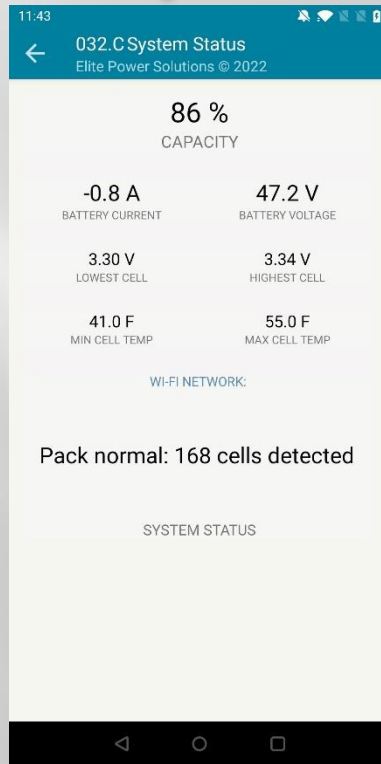
Fleet View - Multiple Systems



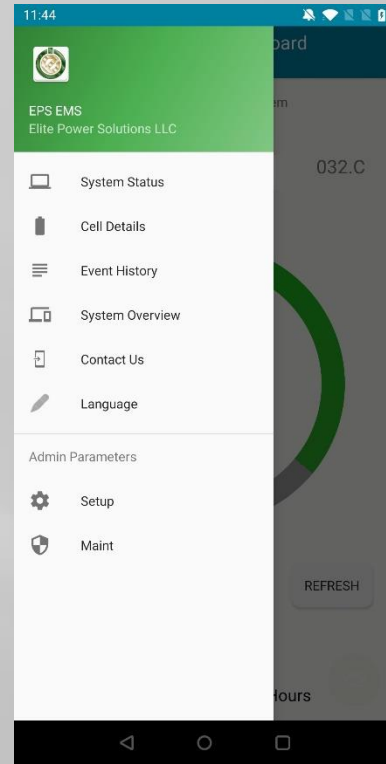
Individual System Status



Dashboard



System Overview



Pull Down Manual

Individual Cell Info and Event History

3:10

032.DCell Details
Elite Power Solutions © 2022

CELL #	Voltage	Temperature
CELL 1	3.30 V	42 F
CELL 2	3.30 V	48 F
CELL 3	3.30 V	48 F
CELL 4	3.31 V	50 F
CELL 5	3.30 V	48 F
CELL 6	3.31 V	51 F
CELL 7	3.31 V	51 F
CELL 8	3.30 V	48 F
CELL 9	3.30 V	53 F
CELL 10	3.31 V	53 F
CELL 11	3.31 V	53 F
CELL 12	3.31 V	51 F
CELL 13	3.31 V	51 F

?

Individual Cells

11:44

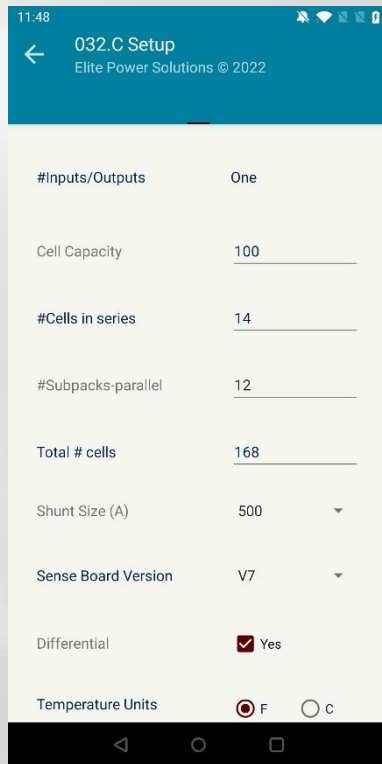
006 Event History
Elite Power Solutions © 2022

2023-02-28 02:36:04, Pack normal: 168 cells detected
2023-02-26 18:06:00, Cell Low Temp Warning / Cell: 48 : 35F
2023-02-26 18:05:55, Cell Low Temp Warning / Cell: 48 : 35F / Pack SOC set to 99% / Pack Voltage: 49.7 Max Cell: 7 : 3.56V Min Cell: 81 : 3.36V
2023-02-25 11:03:10, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-24 06:55:31, Pack normal: 168 cells detected
2023-02-23 22:30:12, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-23 13:17:06, Pack normal: 168 cells detected
2023-02-23 06:17:32, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-20 14:43:38, Pack normal: 168 cells detected
2023-02-20 14:04:00, Battery low warning / : 9 percent left
2023-02-17 09:54:44, Pack normal: 168 cells detected
2023-02-17 09:54:40, Pack SOC set to 99% / Pack Voltage: 49.7 Max Cell: 19 : 3.59V Min Cell: 81 : 3.36V
2023-02-16 09:24:09, Pack normal: 168 cells detected
2023-02-16 09:23:36, Cell Low Temp Warning / Cell: 130 : 37F
2023-02-16 09:23:03, Pack normal: 168 cells detected
2023-02-16 05:51:02, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-16 05:48:46, Pack normal: 168 cells detected
2023-02-16 05:46:17, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-16 05:43:03, Pack normal: 168 cells detected
2023-02-16 05:42:47, Cell Low Temp Warning / Cell: 86 : 37F
2023-02-16 05:39:47, Pack normal: 168 cells detected
2023-02-16 05:20:17, Cell Low Temp Warning / Cell: 86 : 37F

?

Event / Alarm History

System Settings (With Access Control)



11:48

032.C Setup
Elite Power Solutions © 2022

#Inputs/Outputs One

Cell Capacity 100

#Cells in series 14

#Subpacks-parallel 12

Total # cells 168

Shunt Size (A) 500

Sense Board Version V7

Differential Yes

Temperature Units F C

This screenshot shows the 'System Configuration' screen. It features a teal header with a back arrow, the title '032.C Setup', and the copyright notice 'Elite Power Solutions © 2022'. The main content area is white and contains several configuration items, each with a label and a value or control element: '#Inputs/Outputs' (One), 'Cell Capacity' (100), '#Cells in series' (14), '#Subpacks-parallel' (12), 'Total # cells' (168), 'Shunt Size (A)' (500), 'Sense Board Version' (V7), 'Differential' (checked 'Yes'), and 'Temperature Units' (radio buttons for 'F' and 'C').

System Configuration



11:48

006 Maintenance parameters
Elite Power Solutions © 2022

SOC reset to 0% Yes

SOC 0% curr exclusion (A) 15

SOC reset to 100% Yes

SOC 100% curr exclusion (A) 30

Unmanaged cell to reset SOC Yes

% SOC warning 10

% SOC Warning 2 5

Max DOD Reserve

Max DOD % 100

Data logging interval (Min) 1

Max data size (GB) 2

Cell low temp warning (F) 38

Cell low temp alarm (F) 29

Cell low temp alarm2 (F) -4

Cell high temp warning (F) 120

This screenshot shows the 'Parameter Settings' screen. It features a teal header with a back arrow, the title '006 Maintenance parameters', and the copyright notice 'Elite Power Solutions © 2022'. The main content area is white and contains several parameter settings, each with a label and a value or control element: 'SOC reset to 0%' (checkbox 'Yes'), 'SOC 0% curr exclusion (A)' (15), 'SOC reset to 100%' (checkbox 'Yes'), 'SOC 100% curr exclusion (A)' (30), 'Unmanaged cell to reset SOC' (checkbox 'Yes'), '% SOC warning' (10), '% SOC Warning 2' (5), 'Max DOD' (dropdown 'Reserve'), 'Max DOD %' (100), 'Data logging interval (Min)' (1), 'Max data size (GB)' (2), 'Cell low temp warning (F)' (38), 'Cell low temp alarm (F)' (29), 'Cell low temp alarm2 (F)' (-4), and 'Cell high temp warning (F)' (120).

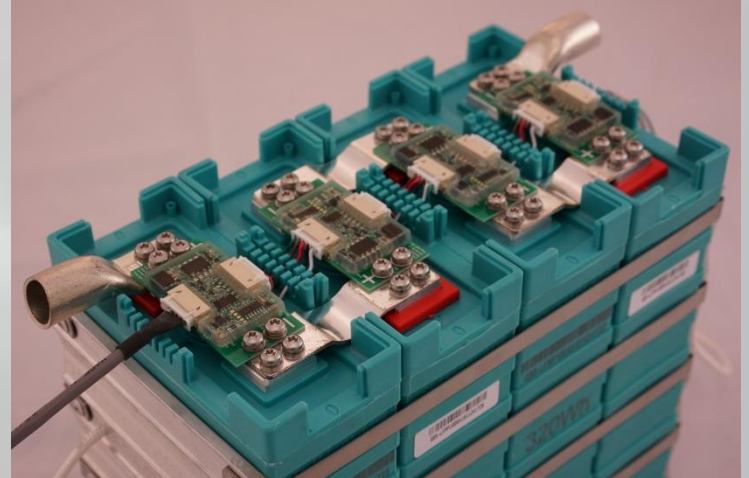
Parameter Settings



Web Application for

BMS System

March 2023



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Fleet View (Real-time)



Elite Power Solutions Analytics Fleet Overview



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sales@elitepowersolutions.com

Add a system... + Add

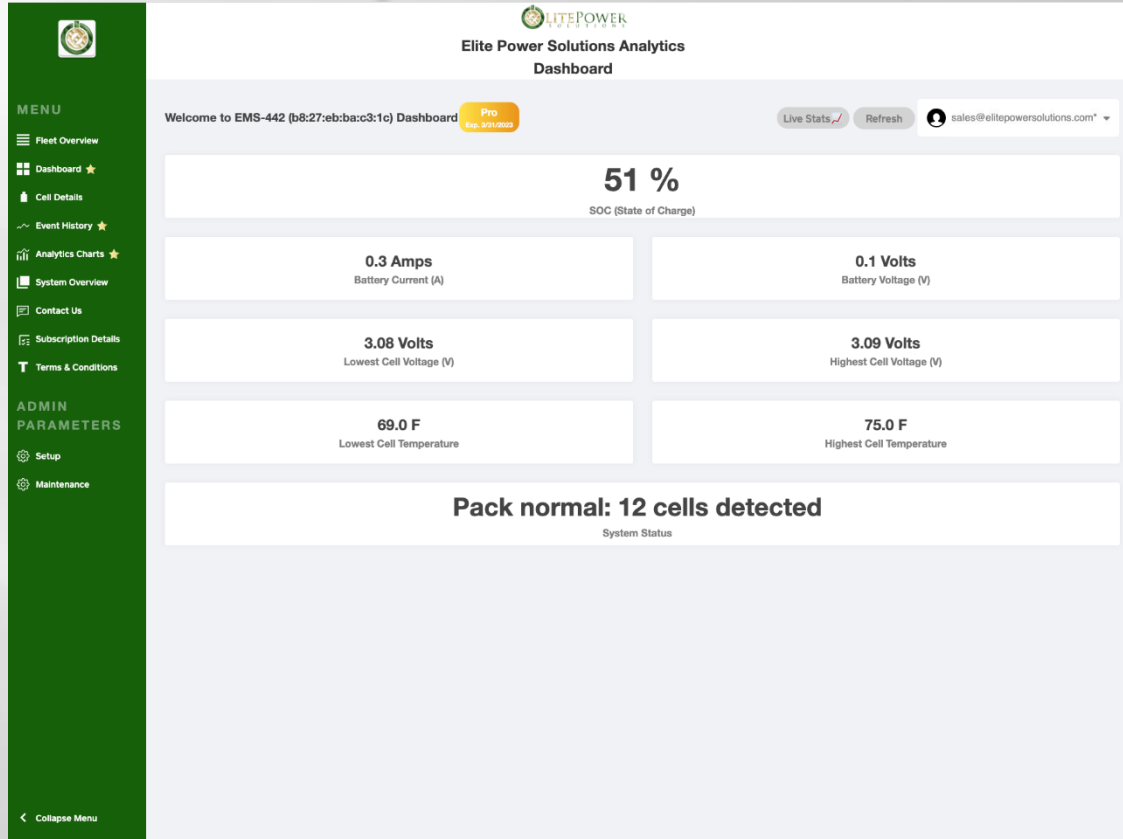
Remove a system... - Remove

Column visibility Show 100 entries

Search:

System ID	Name	SOC	System Status	Online Status	Subscription
b8:27:eb:11:22:10	Elite Power Test10	88	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:11	Elite Power Test11	87	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:12	Elite Power Test12	89	Pack Normal	ONLINE	Auto renew on 3/9/2024
b8:27:eb:11:22:13	Elite Power Test13	70	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:14	Elite Power Test14	0	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:15	Elite Power Test15	82	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:16	Elite Power Test16	49	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:17	Elite Power Test17	78	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:18	Elite Power Test18	49	Cell Low Temp Warning	ONLINE	Basic
b8:27:eb:11:22:19	Elite Power Test19	72	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:20	Elite Power Test20	82	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:21	Elite Power Test21	32	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:22	Elite Power Test22	34	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:23	Elite Power Test23	92	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:24	Elite Power Test24	40	Pack Normal	ONLINE	Expiring on 3/24/2023
b8:27:eb:11:22:25	Elite Power Test25	48	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:26	Elite Power Test26	74	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:27	Elite Power Test27	56	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:28	Elite Power Test28	48	Pack Normal	ONLINE	Auto renew on 3/24/2023
b8:27:eb:11:22:29	Elite Power Test29	49	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:30	Elite Power Test30	47	Pack Normal	ONLINE	Basic
b8:27:eb:11:22:31	Elite Power Test31	49	Pack Normal	ONLINE	Basic

Individual System Status (Real-time)



Cell Details (Real-time)



Elite Power Solutions Analytics Individual Cell Details

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Welcome to EPS Eng Test
(b8:27:eb:5b:7e:5d) Cell Details

Refresh



sales@elitepowersolutions.com*

Show 10 entries

Search:

Cell Number	Cell Voltage (V)	Cell Temperature
1	3.30	69 F
2	3.17	66 F
3	3.17	66 F
4	3.17	66 F
5	3.17	66 F
6	3.17	66 F
7	3.17	66 F
8	3.17	66 F
9	3.17	66 F
10	3.17	66 F

Showing 1 to 10 of 144 entries Previous 1 2 3 4 5 ... 15 Next

Event Log (Real-time)



Elite Power Solutions Analytics Event History

EMS-442 (b8:27:eb:ba:c3:1c)

Pro
Exp. 07/11/2025

Refresh

sales@elitepowersolutions.com*

Select a range:

Start date: mm/dd/yyyy

End date: mm/dd/yyyy

Select a timezone:

Timezone: Chandler, Arizona

Submit

Refresh timestamp

Excel

PDF

Search:

Timestamp

Event

2/28/2023, 10:39:18 AM	Pack normal: 16 cells detected
2/28/2023, 10:39:18 AM	Pack normal: 16 cells detected
2/28/2023, 10:38:32 AM	System Started ...
2/28/2023, 10:38:32 AM	Pack normal: 16 cells detected
2/28/2023, 10:38:08 AM	Graceful shutdown
2/28/2023, 10:27:26 AM	Pack normal: 16 cells detected
2/28/2023, 10:25:11 AM	Pack normal: 16 cells detected
2/28/2023, 10:25:11 AM	Pack normal: 16 cells detected
2/28/2023, 10:24:16 AM	System Started ...
2/28/2023, 10:24:16 AM	Pack normal: 16 cells detected
2/28/2023, 10:23:52 AM	Graceful shutdown
2/28/2023, 10:18:18 AM	Maintenance settings downloaded from cloud to EMS2
2/28/2023, 10:14:08 AM	Pack normal: 16 cells detected
2/28/2023, 10:14:08 AM	Pack normal: 16 cells detected
2/28/2023, 10:13:24 AM	System Started ...
2/28/2023, 10:13:24 AM	Pack normal: 16 cells detected
2/28/2023, 10:12:59 AM	Graceful shutdown
2/28/2023, 10:12:21 AM	Maintenance settings downloaded from cloud to EMS2
2/28/2023, 10:10:19 AM	System setup settings downloaded from cloud to EMS2

Showing 1 to 19 of 19 entries

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Subscription Management Page

Refresh

sales@elitepowersolutions.com*



Welcome back,
victor.yan@elitepowersolutions.com

Total units:73

Subscribed units:8

Unsubscribed units:63

Subscription ending soon units:2

Daily report on subscribed devices Save

Transfer Subscription

Add/Cancel Subscription

From: MAC ID

TARGET: MAC ID

Transfer Now

Column visibility Show 10 entries

Search: EMS-

<input type="checkbox"/>	System ID	Name	System Status	Subscription
<input checked="" type="checkbox"/>	b8:27:eb:ac:20:68	EMS-466	Pack Normal	Basic
<input checked="" type="checkbox"/>	b8:27:eb:bd:55:20	EMS-161	Pack Normal	Basic
<input type="checkbox"/>	b8:27:eb:1c:27:58	EMS-155	Pack Normal	Basic
<input type="checkbox"/>	b8:27:eb:5d:16:1c	EMS-162	Pack Normal	Basic
<input type="checkbox"/>	b8:27:eb:7e:1c:16	EMS-140	Pack Normal	Basic
<input type="checkbox"/>	b8:27:eb:36:ba:0b	EMS-172	Pack Normal	Basic
<input type="checkbox"/>	b8:27:eb:ba:0b:1c	EMS-442	Pack Normal	Auto renew on 3/31/2023

Showing 1 to 7 of 7 entries (filtered from 73 total entries) 2 rows selected

Previous 1 Next


Subscribe selected devices

Cancel subscription

Individual System Status (Real-time Charts)



Remote Parameter Setup (Real-time)



Elite Power Solutions Analytics System Setup

Welcome to EPS Eng Test (b8:27:eb:5b:7e:5d) System Setup

Refresh sales@elitepowersolutions.com*

SAVE SAVE PDF Search:

Setup	Details
Cell Capacity	100
Number of cells in series	12
Number of subpacks in parallel	12
Total number of cells	144
Shunt size (A)	500
Sense board version	V7
Differential	Yes
Temperature units	Fahrenheit
Bluetooth device	Android
External Wifi Dongle	Yes
External Bluetooth Dongle	No
Minimum % SOC cutoff	No
Minimum % SOC	0
ABC mode	No



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Refresh

sales@elitepowersolutions.com

Equipment ID	Name	Equipment Status	Last Online Status	Alarm Occurred	Alarms	Warnings	BOD % SOC	EOD % SOC	Minimum % SOC	Maximum Current (A)	Accumulated Usage (SOC %)	Accumulated # of Charges	Previous Day Usage (SOC)%	Previous Day # of Charger Plugins	Previous Day # of Completed Charges	Previous Day # of Hot Disconnect(s)	% Data Uploaded	Version
b8:27:en:12:34:50	EPS Demo0	ONLINE	Pack normal	No	-	-	50	52	43	114	7497	1874	74	4	2	0	100%	2.9.3
b8:27:en:12:34:51	EPS Demo1	ONLINE	Pack normal	No	-	-	13	71	42	159	2476	619	64	3	3	2	100%	2.9.3
b8:27:en:12:34:52	EPS Demo10	ONLINE	Pack normal	No	Cell low voltage alarm - Min Volt: 2.9; Cell: [24]	Cell low voltage	44	100	53	152	8851	2212	74	2	1	2	100%	2.9.3
b8:27:en:12:34:53	EPS Demo11	ONLINE	Pack normal	No	-	-	13	57	60	290	7230	1807	59	2	2	0	100%	2.9.3
b8:27:en:12:34:54	EPS Demo12	ONLINE	Pack normal	No	-	-	26	85	33	278	2216	738	34	5	1	0	100%	2.9.3
b8:27:en:12:34:55	EPS Demo13	ONLINE	Pack normal	No	-	-	13	70	44	135	3027	605	44	3	1	0	100%	2.9.3
b8:27:en:12:34:56	EPS Demo14	ONLINE	Pack normal	No	-	-	35	92	43	132	7577	1894	68	2	2	1	100%	2.9.3
b8:27:en:12:34:57	EPS Demo15	ONLINE	Pack normal	No	-	-	17	92	42	218	9555	2388	65	2	2	0	100%	2.9.3
b8:27:en:12:34:58	EPS Demo16	ONLINE	Pack normal	No	-	-	35	63	58	268	3467	693	70	3	1	0	100%	2.9.3
b8:27:en:12:34:59	EPS Demo17	ONLINE	Pack normal	No	-	-	9	77	65	217	9987	2496	42	3	1	0	100%	2.9.3
b8:27:en:12:34:66	EPS Demo18	ONLINE	Pack normal	No	-	-	2	93	52	150	5043	1681	54	3	1	2	100%	2.9.3

Daily Report Excel Export

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	Equip ID	Name	Equip Status	Online Status:	Alarm Occurr	Alarms	Warnings	BOD %SOC	EOD %SOC	Min %SOC	Max Current	Accumulative	Accumulative	Previous Day	Previous Day	Previous Day	Previous Day	% Data Uploa	zVers
2	b8:27:eb:11:22:07	EPS TEST 7	ONLINE	Pack normal:	No	-	-	75	90	40	279.2	303	141	141	10	1	0	90	2.9
3	b8:27:eb:11:22:08	EPS TEST 8	ONLINE	Pack normal:	No	-	-	63	95	60	209.6	7336	6435	85	6	4	2	100	2.9
4	b8:27:eb:11:22:09	EPS TEST 9	ONLINE	Pack normal:	No	-	-	100	93	83	265.3	19085	10582	97	10	3	0	100	2.9
5	b8:27:eb:11:22:10	EPS TEST 10	Offline	Pack normal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
6	b8:27:eb:11:22:11	EPS TEST 11	Offline	IMMINENT S-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
7	b8:27:eb:11:22:12	EPS TEST 12	ONLINE	Pack normal:	No	-	-	90	88	75	267.2	22633	15667	61	11	2	4	100	2.9
8	b8:27:eb:11:22:13	EPS TEST 13	ONLINE	Pack normal:	No	-	-	82	68	57	300.7	19489	2571	92	3	1	0	100	2.9
9	b8:27:eb:11:22:14	EPS TEST 14	Offline	Pack normal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
10	b8:27:eb:11:22:15	EPS TEST 15	Offline	Pack normal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
11	b8:27:eb:11:22:16	EPS TEST 16	ONLINE	Pack SOC set No	-	-	-	99	80	47	299.5	19140	10170	154	7	6	0	100	2.9
12	b8:27:eb:11:22:17	EPS TEST 17	ONLINE	Pack normal:	Yes	-	Incompatible	88	90	50	282.7	538	161	119	8	3	0	70	2.9
13	b8:27:eb:11:22:18	EPS TEST 18	Offline	Pack normal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
14	b8:27:eb:11:22:19	EPS TEST 19	ONLINE	Pack normal:	No	-	-	33	78	25	277.5	1987	186	77	5	2	1	100	2.9
15	b8:27:eb:11:22:20	EPS TEST 20	ONLINE	Pack normal:	No	-	-	38	98	37	314.2	16553	3454	12	3	1	0	30	2.9
16	b8:27:eb:11:22:21	EPS TEST 21	ONLINE	Pack normal:	Yes	-	Cell low volta	14	10	10	290.1	9233	1854	167	3	2	1	90	2.9
17	b8:27:eb:11:22:22	EPS TEST 22	Offline	Pack normal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
18	b8:27:eb:11:22:23	EPS TEST 23	Offline	IMMINENT S-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
19	b8:27:eb:11:22:24	EPS TEST 24	ONLINE	Pack normal:	Yes	-	Cell low volta	100	63	14	276.1	70085	10640	235	4	2	0	80	2.9
20	b8:27:eb:11:22:25	EPS TEST 25	ONLINE	Pack normal:	No	-	-	72	98	38	309.7	37691	11364	228	11	7	0	90	2.9
21	b8:27:eb:11:22:26	EPS TEST 26	Offline	Pack normal:	No	-	-	51	94	45	270.5	21313	14958	19	2	1	1	40	2.9
22	b8:27:eb:11:22:27	EPS TEST 27	ONLINE	Pack normal:	No	-	-	98	87	20	277.3	22190	4168	202	6	6	0	100	2.9
23	b8:27:eb:11:22:28	EPS TEST 28	Offline	Unmanaged i-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.9
24	b8:27:eb:11:22:29	EPS TEST 29	ONLINE	Pack normal:	No	-	-	78	37	28	187.7	17083	3346	165	3	1	0	70	2.9
25	b8:27:eb:11:22:30	EPS TEST 30	ONLINE	Pack normal:	No	-	-	100	100	80	267.7	95	33	27	2	2	0	100	2.9
26	b8:27:eb:11:22:31	EPS TEST 31	ONLINE	Pack SOC set No	-	-	-	73	43	35	281.6	203	18	285	12	8	0	100	2.9
27	b8:27:eb:11:22:32	EPS TEST 32	ONLINE	Pack normal:	No	-	-	44	100	43	279.4	14220	3992	161	13	4	0	100	2.9
28	b8:27:eb:11:22:33	EPS TEST 33	Offline	Pack normal:	No	-	-	63	58	25	316.6	28759	7008	67	2	0	0	80	2.9

Analytics Charts



Elite Power Solutions Analytics Charts

EMS-442 (b8:27:eb:ba:c3:1c)

Pro
Exp. 3/31/2023

Refresh

sales@elitepowersolutions.com*

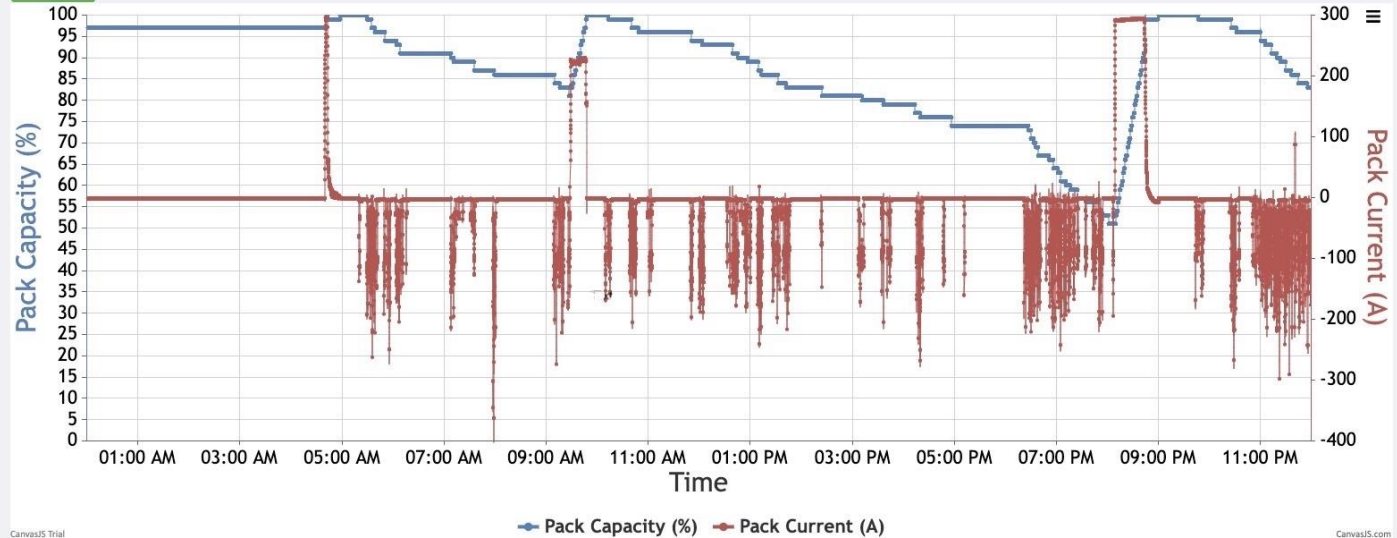
Select a date: 03/01/2023, 07:02:03 PM

2023-03-01 logs

Select data 1: SOC Select data 2: Pack Current

Submit

Select a timezone: Chandler, Arizona



CanvasJS Trial

CanvasJS.com

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