

Battery Capacity Tests

S1 – S4: Samsung INR18650-29E, 7s9p

S5, S6: Samsung INR18650-29E, 7s12p

Battery charged to BMS charge cutoff, 4.2v for highest cell

2014 – 2017: Discharged into resistive load at 12-18* Amps until BMS cutoff, 2.75v for lowest cell

2018 onwards: Discharged into resistive load at 6-9* Amps until BMS cutoff, 2.75v for lowest cell

2020 onwards: S5 & S6 received new Bluetooth BMS.

Battery	Date of Test	Ah	% reduction from new	Wh	% reduction from new
S1	March 2014	25.87		642.0	
	January 2015	23.72	8.31%	582.6	9.25%
	January 2016	23.36	9.71%	570.4	11.15%
	January 2017	23.86	7.77%	586.1	8.71%
	January 2018	24.22	6.38%	607.8	5.33%
	March 2019	23.74	8.24%	590.1	8.08%
	January 2020	23.82	7.94%	589.3	8.21%
	January 2021	23.55	8.96%	585.2	8.85%
	January 2022	23.19	10.37%	575.1	10.42%
	January 2023	22.94	11.34%	560.4	12.71%
	January 2024	23.13	10.61%	569.3	11.32%
S2	March 2014	26.16		650.0	
	January 2015	24.02	8.15%	589.4	9.32%
	January 2016	23.77	9.11%	580.2	10.74%
	January 2017	24.29	7.13%	596.2	8.28%
	January 2018	24.11	7.81%	601.8	7.42%
	March 2019	24.10	7.86%	599.8	7.72%
	January 2020	23.70	9.40%	587.7	9.58%
	January 2021	23.56	9.93%	585.3	9.95%
	January 2022	23.41	10.48%	577.5	11.15%
	January 2023	23.55	9.96%	562.3	13.49%
	January 2024	23.84	8.85%	578.0	11.08%
S3	March 2014	25.88		642.0	
	January 2015	23.67	8.54%	582.0	9.35%
	January 2016	22.98	11.21%	559.8	12.80%
	January 2017	23.71	8.41%	579.7	9.70%
	January 2018	23.78	8.12%	591.6	7.85%
	March 2019	23.74	8.26%	590.5	8.02%
	January 2020	23.60	8.82%	583.3	9.14%
	January 2021	23.38	9.68%	581.5	9.42%
	January 2022	23.21	11.28%	575.2	11.51%
	January 2023	23.04	11.91%	566.1	12.91%
	January 2024	23.14	11.52%	570.9	12.17%
S4	March 2014	26.03		646.2	
	January 2015	23.53	9.60%	575.1	11.00%
	January 2016	23.55	9.52%	571.0	11.64%
	January 2017	24.74	4.97%	605.5	6.30%
	January 2018	23.83	8.46%	594.3	8.03%
	March 2019	24.01	7.78%	598.5	7.38%
	January 2020	23.67	9.09%	586.9	9.18%
	January 2021	23.49	9.78%	581.8	9.97%
	January 2022	23.05	11.87%	567.0	12.77%
	January 2023	23.69	9.44%	579.9	10.78%
	January 2024	23.06	11.84%	567.2	12.74%
S5	March 2014	34.02		849.4	
	January 2015	32.29	5.09%	796.8	6.19%
	January 2016	32.30	5.07%	795.6	6.33%
	January 2017	32.15	5.51%	789.0	7.11%
	January 2018	33.04	2.90%	827.7	2.55%
	March 2019	32.14	5.54%	803.9	5.36%
	January 2020	32.59	4.21%	813.3	4.25%
	January 2021	32.40	4.77%	804.3	5.31%
	January 2022	31.43	7.64%	774.1	8.87%
	January 2023	31.01	8.86%	762.2	10.27%
	January 2024	31.28	8.07%	768.9	9.48%
S6	March 2014	33.88		844.8	
	January 2015	32.40	4.35%	802.8	4.97%
	January 2016	32.18	5.02%	792.3	6.21%
	January 2017	33.37	1.48%	815.9	3.42%
	January 2018	33.08	2.34%	831.1	1.62%
	March 2019	32.14	5.13%	804.0	4.83%
	January 2020	32.62	3.72%	813.9	3.66%
	January 2021	32.45	4.21%	809.2	4.21%
	January 2022	31.23	7.82%	771.2	8.71%
	January 2023	31.00	8.50%	766.0	9.33%
	January 2024	31.22	7.85%	769.80	8.88%