

Sheet1

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

Discharged into resistive load at 12-18* Amps to BMS cutoff, 2.75v for lowest cell

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%
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%
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%
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%
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%
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%

*Note: January 2018 tests used a current draw of 6-9 Amps.