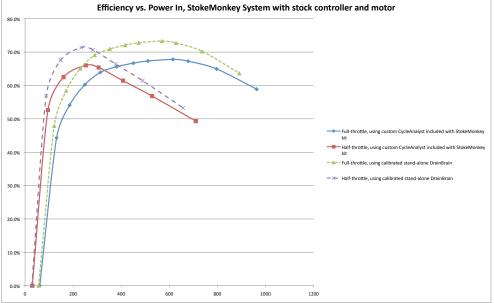
StokeMonkey Stock controller and configuration 36 volt (nominal) supply

I-throttle

·uli-throttle					
aw data Power (into controller)	Power (load at wheel)	Efficiency	Voltage	Current	Motor RPM
61	nower (load at wheel)	0.0%	39.5	1.5	377
131	58	44.3%	39.4	3.3	367
185	100	54.1%	39.3	4.7	362
249	150	60.2%	39.1	6.4	355
313	200	63.9%	39.0	8.0	348
381	250	65.6%	38.8	9.8	338
450	300	66.7%	38.7	11.6	333
511	344	67.3%	38.5	13.3	325
615	417	67.8%	38.3	16.1	313
678	456	67.3%	38.0	17.8	302
796	517	64.9%	37.9	21.0	290
963	567	58.9%	37.2	25.9	244
Half-throttle					
aw data					
Power (into controller)	Power (load at wheel)	Efficiency	Voltage	Current	Motor RPM
30	0	0.0%	39.5	0.8	217
95	50	52.6%	39.3	2.4	209
160	100	62.5%	39.2	4.1	197
253	167	66.0%	38.9	6.5	188
306	200	65.4%	38.8	7.9	178
407	250	61.4%	38.2	10.7	166
528	300	56.8%	38.0	13.9	157
740					
710 Full-throttle	350	49.3%	37.5	18.9	133
ull-throttle	350 Power (load at wheel)	49.3% Efficiency	37.5 Voltage	Current	
iull-throttle idjusted data* Power (into controller) 56	Power (load at wheel)	Efficiency 0.0%	Voltage 40.0	Current 1.4	Motor RPM
full-throttle idjusted data* Power (into controller) 56 121	Power (load at wheel) 0 58	Efficiency 0.0% 47.9%	Voltage 40.0 39.9	Current 1.4 3.0	Motor RPM 377 367
full-throttle diusted data* Power (into controller) 56 121 171	Power (load at wheel) 0 58 100	Efficiency 0.0% 47.9% 58.4%	Voltage 40.0 39.9 39.8	Current 1.4 3.0 4.3	Motor RPM 377 367 362
rull-throttle ddjusted data* Power (into controller) 56 121 171 230	Power (load at wheel) 0 58 100 150	Efficiency 0.0% 47.9% 58.4% 65.1%	Voltage 40.0 39.9 39.8 39.6	Current 1.4 3.0 4.3 5.8	Motor RPM 377 367 362 355
full-throttle dijusted data* Power (into controller) 56 121 171 230 290	Power (load at wheel) 0 58 100 150 200	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1%	Voltage 40.0 39.9 39.8 39.6 39.5	Current 1.4 3.0 4.3 5.8 7.3	Motor RPN 377 367 362 352 348
full-throttle ddjusted data* Power (into controller) 56 121 171 230 290 352	Power (load at wheel) 0 58 100 150 200 250	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3	Current 1.4 3.0 4.3 5.8 7.3 9.0	Motor RPM 377 362 362 355 344 338
rull-throttle ddjusted data* Power (into controller) 56 121 171 230 290 352 416	Power (load at wheel) 0 58 100 150 200 250 300	Efficiency 0.0% 47.99% 58.49% 65.19% 69.19% 70.99% 72.11%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6	Motor RPM 377 367 362 355 348 338 333
iull-throttle idjusted data* Power (into controller) 56 121 171 230 290 352 416 473	Power (load at wheel) 0 58 100 150 200 250 300 344	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1	Motor RPM 377 362 355 348 338 333 325
iull-throttle djusted data* Power (into controller) 56 121 171 230 352 416 473 569	Power (load at wheel) 0 58 100 150 200 250 300 344 417	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7	Motor RPM 377 367 362 355 348 338 333 325 313
Full-throttle adjusted data* Power (into controller) 121 171 230 290 352 416 473 569 627	Power (load at wheel) 58 100 200 250 300 344 417 456	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 73.3% 73.27%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3	Motor RPM 377 367 362 355 348 338 333 325 313
Full-throttle Idjusted data* Power (into controller) 56 121 171 230 352 416 473 569 627 736	Power (load at wheel) 0 58 100 150 200 250 300 344 417 456 517	Efficiency 0.0% 47.3% 47.3% 58.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3% 72.7% 70.2%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3	Motor RPM 377 367 362 355 348 333 325 313 302 290
Full-throttle adjusted data* Power (into controller) 121 171 230 290 352 416 473 569 627	Power (load at wheel) 58 100 200 250 300 344 417 456	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 73.3% 73.27%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3	Motor RPM 377 367 362 355 348 333 325 313 302 290
rull-throttle diusted data* Power (into controller) 55 121 171 230 352 416 473 569 627 736 891	Power (load at wheel) 0 58 100 150 200 250 300 344 417 456 517	Efficiency 0.0% 47.3% 47.3% 58.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3% 72.7% 70.2%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3	Motor RPN 377 363 363 355 348 333 325 311 300 290
Full-throttle didusted data* Power (into controller) 121 171 230 290 352 416 473 569 627 736 891 Half-throttle didusted data*	Power (load at wheel) 58 100 200 250 300 344 417 456 517 567	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 73.3% 72.7% 70.2% 63.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6	Motor RPM 377 367 362 355 344 333 322 313 302 299 244
rull-throttle diusted data* Power (into controller) 55 121 171 230 352 416 473 569 627 736 891 Half-throttle diusted data* Power (into controller)	Power (load at wheel) 0 58 100 150 250 300 344 417 456 517 567	Efficiency 0.0% 47,9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3% 72.7% 63.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.7 Voltage	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6	Motor RPM 377 367 362 355 348 333 322 311 302 299 244
Full-throttle adjusted data* Power (into controller) 121 121 1230 290 352 416 473 569 627 736 891 Half-throttle ddusted data* Power (into controller) 28	Power (load at wheel)	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.2% 73.3% 72.2% 63.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6	Motor RPM 377 367 363 355 344 333 322 311 302 299 244
rull-throttle diusted data* Power (into controller) 121 121 230 352 416 473 569 627 736 891 tallf-throttle djusted data* Power (into controller) Power (into controller) 88	Power (load at wheel) 0 58 100 150 250 300 344 417 456 517 567 Power (load at wheel) 0 50	Efficiency 0.0% 47.9% 48.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3% 72.7% 63.7% 63.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2	Motor RPM 377 363 365 365 344 338 33 322 313 300 290 244 Motor RPM 217 200
Full-throttle adjusted data* Power (into controller) 121 121 1230 290 352 416 473 569 627 736 891 Half-throttle ddusted data* Power (into controller) 28	Power (load at wheel) 58 100 200 250 300 344 417 456 517 567 Power (load at wheel) 0 50	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.2% 70.2% 63.7% Efficiency 0.0% 56.9% 67.6%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2 3.7	Motor RPM 377 366 365 355 344 333 322 311 300 299 244 Motor RPM 217 209
Full-throttie diusted data* Rower (into controller) 121 230 352 416 473 569 627 736 891 Half-throttle diusted data* Rower (into controller) 88 88 148 234	Power (load at wheel) 0 58 100 150 250 300 344 417 456 517 567 Power (load at wheel) 0 50 100	Efficiency 0.0% 47.9% 38.4% 65.1% 69.1% 70.9% 72.1% 72.8% 73.3% 72.7% 63.7% 63.7% 63.7% 63.7% 63.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7 Voltage 40.0 39.8 39.8 39.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2 3.7 5.9	Motor RPM 377 367 362 355 344 333 322 313 302 290 244 Motor RPM 217 200 191
rull-throttle diusted data* Power (into controller) 121 121 230 290 352 416 473 569 627 736 891 talf-throttle diusted data* Power (into controller) 28 88 88	Power (load at wheel) 58 100 200 250 300 344 417 456 517 567 Power (load at wheel) 0 50	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.2% 70.2% 63.7% Efficiency 0.0% 56.9% 67.6% 71.4% 70.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2 3.7	Motor RPM 377 367 362 355 344 333 322 311 302 299 244 Motor RPM 217 200 199 188
Full-throttle adjusted data* Power (into controller) 121 171 230 290 352 416 473 569 627 736 891 Half-throttle adjusted data* Power (into controller) 28 88 148 1244 283	Power (load at wheel) 0 58 100 250 300 344 417 456 517 567 Power (load at wheel) 0 0 100 167 200 250	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.2% 72.2% 63.7% 63.7% 65.1% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 63.7% 64.4%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7 Voltage 40.0 39.8 39.7 39.3	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2 3.7 5.9 7.2 9.7.2	Motor RPM 377 363 363 355 344 333 322 311 302 299 244 Motor RPM 217 200 197 188 81 176
Full-throttle distated data* Power (into controller)	Power (load at wheel)	Efficiency 0.0% 47.9% 58.4% 65.1% 69.1% 70.9% 72.1% 72.2% 70.2% 63.7% Efficiency 0.0% 56.9% 67.6% 71.4% 70.7%	Voltage 40.0 39.9 39.8 39.6 39.5 39.3 39.2 39.0 38.8 38.5 38.4 37.7 Voltage 40.0 39.8 39.7 39.4 39.3 38.7	Current 1.4 3.0 4.3 5.8 7.3 9.0 10.6 12.1 14.7 16.3 19.2 23.6 Current 0.7 2.2 3.7 5.9 7.2	Motor RPM 377 367 362 355 348 333 325 313 302 290 244 Motor RPM 217 209 199 188 178 166







Notes: Efficiency was measured by comparing energy drawn from the battery according to a Cycle Analyst and comparing that to energy sent to the rear wheel of the bicycle as read from a PowerTap hub. Motor power passes through a 16t freewheel connected to a 44t left chainring by normal bicycle chain.

Power is then transferred through the bottom bracket to a 44t chainring connected to a 23t sprocket on the rear wheel by normal bicycle chain.

Efficiency of the two-stages of bicycle chains is probably around 94%.

^{*} Data has been adjusted to be comparable with other tests in this workbook, using adjustment factors for the DrainBrain meter used to produce data in other tests. The reference DrainBrain reads voltage 1.3% higher and power approximately 7.5% lower than the customized CycleAnalyst provided with this StokeMonkey system.