

Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: Dualsky ECO2814C V2
KV: 970
Magnet poles: 14
Propeler: Aerinaut Glass 12x7 fold
Blade count: 2
Note: Battery 3S 2600 mAh

Measurement Results 1:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	59.05	3.388	155.61	41.443	1951	45.0	12.580	0.0034	0.665	0.0292	8.359	7.065
30	169.89	1.392	334.89	41.362	2741	13.2	12.560	0.0054	1.406	0.0317	17.662	9.619
40	329.78	0.798	632.93	41.278	3665	22.3	12.522	0.0050	2.998	0.0317	37.542	8.784
50	503.23	1.335	969.98	41.295	4459	24.6	12.466	0.0063	5.342	0.0553	66.598	7.556
60	740.36	1.963	1383.37	41.275	5231	42.2	12.381	0.0097	8.845	0.0486	109.513	6.760
70	1043.00	4.112	1947.29	41.409	6168	55.7	12.244	0.0091	13.888	0.0726	170.042	6.134
80	1381.31	4.494	2509.25	41.947	6988	63.2	12.078	0.0116	20.042	0.1080	242.070	5.706
90	1644.47	7.710	3017.16	43.223	7578	53.5	11.889	0.0111	26.714	0.1466	317.589	5.178
100	1902.23	7.706	3480.86	44.440	8084	46.7	11.685	0.0137	33.812	0.2027	395.105	4.814

Measurement Results 2:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	54.79	13.899	150.24	38.980	1926	48.9	12.375	0.0039	0.660	0.0311	8.164	6.711
30	162.40	0.839	318.27	37.251	2705	14.7	12.359	0.0039	1.373	0.0312	16.970	9.570
40	319.25	0.891	610.65	37.257	3615	15.8	12.323	0.0058	2.943	0.0410	36.264	8.804
50	492.71	1.299	932.71	37.261	4382	21.9	12.268	0.0065	5.198	0.0414	63.767	7.727
60	723.29	3.301	1351.60	37.266	5195	45.4	12.175	0.0074	8.694	0.0473	105.851	6.833
70	1020.61	2.762	1884.38	37.383	6096	52.8	12.057	0.0089	13.604	0.0865	164.019	6.223
80	1335.44	4.103	2429.37	37.931	6874	65.3	11.908	0.0086	19.517	0.1022	232.405	5.746
90	1599.63	6.297	2920.87	38.675	7494	50.7	11.733	0.0100	25.976	0.1157	304.771	5.249
100	1843.81	9.411	3379.98	39.985	7981	49.9	11.545	0.0129	33.083	0.2150	381.936	4.828

Measurement Results 3:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	57.58	4.216	142.03	33.204	1909	51.7	12.221	0.0035	0.653	0.0297	7.978	7.218
30	158.29	0.895	310.25	33.060	2667	14.5	12.206	0.0055	1.353	0.0386	16.518	9.583
40	311.32	0.984	591.73	33.077	3576	16.3	12.171	0.0057	2.878	0.0312	35.031	8.887
50	476.12	1.265	904.61	33.083	4333	23.8	12.119	0.0051	5.085	0.0309	61.621	7.727
60	708.62	2.072	1314.61	33.071	5142	47.4	12.031	0.0094	8.507	0.0521	102.350	6.924
70	996.75	4.141	1840.62	33.120	6031	38.7	11.903	0.0111	13.352	0.0871	158.922	6.272
80	1308.33	4.292	2367.85	33.411	6804	68.1	11.735	0.0134	19.135	0.0781	224.542	5.827
90	1563.46	4.962	2853.03	34.529	7389	60.4	11.547	0.0136	25.436	0.0934	293.711	5.323
100	1789.86	4.983	3285.37	34.326	7885	44.8	11.348	0.0121	32.216	0.1413	365.592	4.896

Measurement Results 4:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	55.60	3.723	124.86	70.330	1880	52.2	11.983	0.0045	0.649	0.0291	7.775	7.151
30	150.62	0.936	286.10	70.241	2618	13.3	11.968	0.0038	1.316	0.0300	15.750	9.563
40	295.99	0.877	553.48	70.244	3500	22.5	11.933	0.0037	2.766	0.0393	33.011	8.966
50	456.01	1.188	857.92	70.246	4260	24.3	11.879	0.0044	4.919	0.0403	58.426	7.805
60	690.56	2.310	1267.16	70.244	5066	40.0	11.806	0.0071	8.291	0.0435	97.886	7.055
70	978.17	5.095	1779.95	70.270	5958	60.5	11.686	0.0072	13.045	0.0668	152.450	6.416
80	1273.62	5.078	2293.07	70.335	6737	68.7	11.548	0.0091	18.650	0.0624	215.370	5.914
90	1541.85	3.081	2782.87	70.395	7347	51.3	11.393	0.0094	24.976	0.0582	284.565	5.418
100	1761.74	6.687	3228.44	71.004	7853	47.7	11.218	0.0090	31.725	0.2144	355.878	4.950

Measurement Results 5:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	54.76	3.614	115.21	79.412	1866	50.6	11.879	0.0042	0.630	0.0286	7.489	7.313
30	147.73	1.019	273.10	79.328	2596	12.5	11.861	0.0042	1.304	0.0221	15.468	9.550
40	289.28	1.049	534.78	79.335	3466	18.3	11.831	0.0055	2.701	0.0312	31.955	9.053
50	449.03	1.155	834.73	79.330	4229	24.2	11.778	0.0055	4.852	0.0390	57.150	7.857
60	677.71	1.683	1244.86	79.335	5044	38.0	11.695	0.0089	8.206	0.0417	95.971	7.062
70	967.69	2.307	1742.69	79.395	5899	64.9	11.579	0.0091	12.885	0.0691	149.202	6.486
80	1248.35	7.365	2246.33	79.904	6686	66.2	11.437	0.0089	18.387	0.0918	210.296	5.936
90	1515.69	5.962	2737.18	79.732	7297	51.0	11.286	0.0086	24.603	0.0857	277.664	5.459
100	1741.96	11.526	3179.97	81.782	7796	47.4	11.115	0.0095	31.307	0.1693	347.984	5.006

Plots for Measurement Results:

