Tool info

Serial API: Board: Firmware: Commit:

Measurement info

Motor: Dualsky ECO2814C V2

KV: 970 Magnet poles: 14

Propeler: CamZ 12x6 fold

Blade count: 2

Note: Battery 3S 2600mAh

Measurement Results 1:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev	FIII [VV]	[G/W]
20	64.68	2.525	193.95	6.443	1821	17.6	12.563	0.0044	0.668	0.0311	8.398	7.702
30	181.68	2.490	430.42	6.377	2663	15.7	12.545	0.0042	1.562	0.0291	19.591	9.274
40	365.74	2.482	755.01	6.378	3570	14.0	12.498	0.0059	3.343	0.0409	41.781	8.754
50	540.95	2.504	1086.64	6.385	4306	23.3	12.434	0.0060	5.806	0.0487	72.193	7.493
60	777.33	3.223	1517.69	6.789	5095	53.4	12.339	0.0091	9.583	0.0423	118.240	6.574
70	1098.26	3.223	2112.63	6.717	5957	61.0	12.196	0.0118	14.950	0.0644	182.332	6.023
80	1374.90	2.902	2717.03	7.607	6706	77.2	12.010	0.0113	21.582	0.0606	259.207	5.304
90	1609.58	6.276	3223.76	12.985	7275	57.6	11.812	0.0117	28.451	0.1538	336.068	4.789
100	1826.06	11.295	3647.40	17.143	7707	52.4	11.597	0.0120	35.508	0.1813	411.777	4.435

Measurement Results 2:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev	1 111 [111]	[G/W]
20	53.91	8.661	190.59	6.797	1796	16.2	12.348	0.0030	0.661	0.0293	8.159	6.607
30	167.55	8.641	420.23	6.755	2625	12.9	12.330	0.0039	1.514	0.0306	18.671	8.974
40	344.63	8.633	729.20	6.755	3499	19.2	12.288	0.0052	3.234	0.0305	39.739	8.672
50	518.02	8.671	1056.45	6.877	4223	21.5	12.229	0.0050	5.676	0.0524	69.414	7.463
60	762.68	8.882	1495.99	6.823	5040	55.6	12.132	0.0087	9.468	0.0391	114.868	6.640
70	1070.40	8.749	2065.59	7.287	5887	60.9	11.996	0.0096	14.728	0.0602	176.682	6.058
80	1331.72	8.929	2632.28	10.807	6610	64.4	11.833	0.0076	20.994	0.0845	248.421	5.361
90	1559.20	9.465	3130.24	15.322	7186	47.2	11.651	0.0093	27.719	0.1071	322.955	4.828
100	1767.89	12.521	3557.72	25.534	7619	45.9	11.453	0.0110	34.761	0.1546	398.132	4.440

Measurement Results 3:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev	FIII [VV]	[G/W]
20	54.36	9.535	186.09	7.507	1764	14.1	12.196	0.0035	0.628	0.0308	7.654	7.102
30	162.60	9.499	410.55	7.447	2586	12.5	12.174	0.0046	1.507	0.0310	18.349	8.861
40	336.86	9.511	715.28	7.455	3457	20.5	12.135	0.0045	3.153	0.0304	38.265	8.804
50	510.58	9.504	1033.75	7.477	4175	20.8	12.071	0.0061	5.538	0.0310	66.854	7.637
60	752.45	9.539	1467.84	7.448	4988	30.3	11.961	0.0104	9.254	0.0516	110.695	6.798
70	1048.82	9.851	2025.22	8.021	5827	56.5	11.822	0.0097	14.453	0.0870	170.858	6.139
80	1309.90	9.625	2572.71	10.073	6542	59.6	11.640	0.0138	20.522	0.0881	238.882	5.483
90	1515.89	10.886	3039.70	12.380	7083	42.3	11.442	0.0121	27.049	0.1142	309.482	4.898
100	1734.03	12.330	3456.66	14.661	7520	43.0	11.246	0.0117	33.922	0.1208	381.492	4.545

Measurement Results 4:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev	FIII [VV]	[G/W]
20	56.44	4.085	182.71	7.591	1740	15.8	11.942	0.0038	0.633	0.0286	7.558	7.468
30	157.64	4.024	392.99	7.547	2531	14.1	11.925	0.0029	1.424	0.0304	16.986	9.280
40	327.38	3.981	686.44	7.540	3392	15.0	11.890	0.0062	3.037	0.0407	36.110	9.066
50	497.80	3.971	1006.33	7.547	4111	22.1	11.830	0.0065	5.385	0.0409	63.710	7.813
60	736.71	4.047	1434.30	7.685	4923	44.2	11.739	0.0080	8.997	0.0464	105.615	6.975
70	1029.95	4.247	1977.39	7.894	5760	51.9	11.615	0.0072	14.157	0.0858	164.429	6.264
80	1301.20	4.399	2523.01	10.490	6483	53.2	11.462	0.0088	20.095	0.0613	230.323	5.649
90	1502.92	4.527	3008.28	12.635	7035	38.6	11.292	0.0112	26.641	0.1087	300.834	4.996
100	1714.76	5.163	3431.86	15.775	7491	33.7	11.110	0.0085	33.581	0.1712	373.066	4.596

Measurement Results 5:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev	FIII [VV]	[G/W]
20	53.66	4.882	175.55	32.031	1726	15.0	11.833	0.0035	0.619	0.0325	7.325	7.325
30	155.97	4.836	381.48	32.023	2507	12.5	11.812	0.0053	1.422	0.0330	16.795	9.286
40	321.30	4.715	667.66	32.024	3357	19.6	11.776	0.0050	3.005	0.0312	35.383	9.080
50	492.18	4.720	987.60	32.050	4074	20.0	11.718	0.0066	5.300	0.0424	62.102	7.925
60	723.53	5.164	1410.24	32.068	4899	46.1	11.623	0.0068	8.868	0.0533	103.069	7.020
70	1011.36	5.204	1939.05	32.248	5719	45.9	11.498	0.0095	13.899	0.0794	159.813	6.328
80	1283.75	5.009	2477.33	32.450	6432	62.9	11.347	0.0096	19.806	0.0636	224.735	5.712
90	1482.06	5.138	2957.19	33.124	6987	38.7	11.188	0.0101	26.286	0.0832	294.073	5.040
100	1688.31	7.195	3377.18	34.470	7442	44.7	11.012	0.0097	33.015	0.1282	363.562	4.644

Plots for Measurement Results:

