

Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: Dualsky ECO2814C V2
KV: 970
Magnet poles: 14
Propeler: Graupner 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 [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	62.22	5.164	184.64	56.405	1961	21.1	12.575	0.0054	0.666	0.0304	8.374	7.431
30	165.80	5.035	375.37	56.392	2717	15.6	12.552	0.0051	1.417	0.0307	17.780	9.325
40	344.51	5.035	690.42	56.392	3655	20.3	12.509	0.0040	3.036	0.0431	37.974	9.072
50	549.51	5.044	1006.52	56.395	4458	25.1	12.444	0.0060	5.367	0.0511	66.784	8.228
60	787.51	5.045	1385.46	56.400	5226	43.0	12.359	0.0100	8.705	0.0513	107.583	7.320
70	1121.04	5.735	1930.17	56.464	6140	59.2	12.219	0.0092	13.639	0.0642	166.663	6.726
80	1480.03	5.510	2490.37	56.631	6976	56.3	12.045	0.0121	19.711	0.0838	237.423	6.234
90	1775.35	8.358	2992.52	57.291	7583	58.0	11.846	0.0118	26.293	0.1340	311.476	5.700
100	2046.59	13.448	3434.56	58.397	8080	44.5	11.638	0.0093	33.296	0.1417	387.493	5.282

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	63.81	6.149	178.20	49.230	1942	16.7	12.367	0.0033	0.643	0.0221	7.946	8.030
30	158.83	6.101	366.44	49.215	2678	14.1	12.351	0.0055	1.368	0.0310	16.900	9.398
40	334.83	6.094	668.69	49.214	3594	18.2	12.312	0.0056	2.951	0.0396	36.327	9.217
50	524.78	6.097	972.78	49.217	4381	21.1	12.253	0.0048	5.197	0.0402	63.681	8.241
60	768.00	6.226	1350.56	49.232	5157	41.5	12.160	0.0090	8.537	0.0536	103.808	7.398
70	1081.09	6.695	1873.71	49.308	6082	60.6	12.033	0.0090	13.327	0.0628	160.356	6.742
80	1415.04	7.657	2405.88	49.458	6869	76.2	11.861	0.0114	19.200	0.0889	227.720	6.214
90	1708.80	8.300	2900.33	49.552	7480	52.9	11.691	0.0078	25.663	0.0634	300.013	5.696
100	1962.86	15.073	3331.29	52.410	7965	50.2	11.495	0.0093	32.402	0.1808	372.465	5.270

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	61.19	6.062	178.32	25.444	1916	29.4	12.211	0.0037	0.632	0.0291	7.723	7.923
30	154.91	5.957	361.62	25.381	2652	12.2	12.195	0.0031	1.332	0.0312	16.239	9.539
40	326.83	5.925	654.44	25.386	3556	18.9	12.154	0.0047	2.859	0.0402	34.753	9.404
50	515.63	6.055	952.12	25.394	4321	24.3	12.091	0.0066	5.106	0.0380	61.740	8.352
60	753.72	5.984	1326.93	25.391	5109	41.9	12.007	0.0084	8.405	0.0542	100.920	7.469
70	1069.28	6.653	1833.24	25.579	6005	44.3	11.874	0.0099	13.052	0.0673	154.984	6.899
80	1386.53	6.107	2357.83	25.899	6783	72.8	11.695	0.0147	18.792	0.0664	219.776	6.309
90	1677.72	7.283	2821.31	30.338	7380	49.8	11.495	0.0132	24.950	0.1087	286.811	5.850
100	1932.36	13.108	3247.46	28.946	7870	45.2	11.289	0.0124	31.670	0.1614	357.523	5.405

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	61.63	5.282	176.48	25.407	1885	25.8	11.962	0.0046	0.615	0.0311	7.354	8.381
30	148.34	5.203	350.92	25.379	2598	12.0	11.942	0.0039	1.304	0.0220	15.569	9.528
40	310.51	5.191	630.18	25.369	3477	17.4	11.910	0.0053	2.787	0.0312	33.190	9.355
50	495.21	5.195	919.01	25.377	4250	25.2	11.854	0.0058	4.936	0.0400	58.510	8.464
60	730.70	5.381	1290.98	25.397	5056	43.7	11.768	0.0081	8.193	0.0503	96.415	7.579
70	1034.60	5.915	1780.53	25.504	5922	53.3	11.654	0.0072	12.726	0.0652	148.310	6.976
80	1345.76	5.464	2288.85	25.610	6702	66.7	11.507	0.0093	18.309	0.0733	210.684	6.388
90	1635.78	8.813	2758.13	29.169	7305	56.6	11.344	0.0094	24.449	0.0791	277.348	5.898
100	1887.15	10.334	3184.25	27.231	7810	39.6	11.170	0.0082	31.123	0.1392	347.629	5.429

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	61.67	5.147	173.67	12.089	1870	28.9	11.854	0.0043	0.610	0.0294	7.226	8.534
30	141.40	5.042	345.58	11.996	2574	11.4	11.838	0.0053	1.289	0.0309	15.263	9.265
40	302.17	5.031	618.41	12.002	3444	18.2	11.804	0.0048	2.722	0.0408	32.135	9.403
50	484.64	5.041	905.04	12.009	4212	21.6	11.747	0.0058	4.851	0.0408	56.985	8.505
60	721.30	5.039	1274.38	12.044	5018	27.3	11.660	0.0093	8.080	0.0412	94.213	7.656
70	1015.02	5.390	1756.23	12.287	5881	56.0	11.542	0.0075	12.606	0.0691	145.507	6.976
80	1319.80	6.350	2253.12	12.432	6646	63.0	11.401	0.0080	18.074	0.0732	206.064	6.405
90	1600.39	9.526	2710.74	13.463	7261	46.7	11.244	0.0090	24.107	0.0844	271.065	5.904
100	1858.31	9.686	3149.22	16.786	7769	37.8	11.067	0.0102	30.756	0.1301	340.386	5.459

Plots for Measurement Results:

