

Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: Dualsy ECO2814C V2
KV: 970
Magnet poles: 14
Propeler: Aeronaut 12.5x6 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	58.09	10.729	203.82	9.387	1747	13.9	12.568	0.0049	0.681	0.0280	8.561	6.785
30	183.79	10.712	478.68	9.365	2610	11.6	12.541	0.0053	1.730	0.0311	21.698	8.470
40	368.98	10.971	835.70	9.385	3491	19.2	12.495	0.0052	3.697	0.0413	46.198	7.987
50	542.35	10.813	1202.94	9.369	4170	25.1	12.421	0.0060	6.396	0.0425	79.445	6.827
60	784.90	10.952	1691.08	9.503	4951	38.0	12.306	0.0105	10.523	0.0414	129.497	6.061
70	1101.86	11.875	2348.21	9.549	5800	60.2	12.144	0.0094	16.518	0.0736	200.603	5.493
80	1424.40	13.215	2970.10	12.664	6502	55.2	11.945	0.0152	23.423	0.1109	279.796	5.091
90	1700.24	17.940	3446.29	32.877	7004	48.7	11.723	0.0157	30.485	0.1821	357.380	4.758
100	1902.31	12.154	3842.71	20.296	7378	49.2	11.492	0.0135	37.647	0.1707	432.648	4.397

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	46.86	7.556	201.73	12.446	1719	12.5	12.315	0.0052	0.641	0.0270	7.889	5.940
30	170.88	7.527	469.80	12.426	2567	12.0	12.293	0.0044	1.685	0.0305	20.713	8.250
40	335.13	7.632	810.13	12.434	3392	15.9	12.247	0.0044	3.566	0.0409	43.668	7.674
50	513.92	7.692	1166.27	12.437	4075	23.5	12.177	0.0063	6.231	0.0397	75.877	6.773
60	765.89	7.625	1655.77	12.542	4887	47.8	12.071	0.0093	10.278	0.0543	124.070	6.173
70	1058.80	8.438	2254.95	13.312	5700	36.1	11.924	0.0082	16.029	0.0734	191.134	5.540
80	1351.68	8.238	2831.63	13.789	6365	68.1	11.750	0.0119	22.631	0.1123	265.905	5.083
90	1625.92	10.889	3300.58	20.148	6870	45.2	11.555	0.0126	29.501	0.1485	340.885	4.770
100	1828.78	14.681	3685.90	25.767	7259	46.2	11.329	0.0145	36.551	0.2163	414.086	4.416

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	50.64	13.122	191.53	12.303	1685	17.6	12.087	0.0042	0.634	0.0350	7.660	6.612
30	172.02	13.090	449.20	12.227	2521	11.8	12.060	0.0039	1.648	0.0351	19.871	8.657
40	329.30	13.149	778.20	12.261	3334	18.6	12.016	0.0057	3.467	0.0480	41.655	7.905
50	495.61	13.121	1126.60	12.267	4013	21.4	11.946	0.0073	6.054	0.0441	72.325	6.853
60	745.58	13.198	1598.63	12.295	4815	45.1	11.833	0.0108	9.983	0.0507	118.125	6.312
70	1036.95	13.361	2176.30	12.455	5616	51.5	11.682	0.0110	15.663	0.0662	182.979	5.667
80	1328.77	14.414	2735.52	14.880	6248	59.7	11.506	0.0125	22.062	0.1159	253.838	5.235
90	1574.32	16.436	3186.28	18.253	6761	38.1	11.329	0.0097	28.706	0.1270	325.203	4.841
100	1786.99	15.889	3584.78	22.015	7149	49.3	11.127	0.0124	35.815	0.1632	398.526	4.484

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	59.80	2.931	181.80	9.776	1662	17.7	11.900	0.0043	0.633	0.0364	7.533	7.939
30	174.59	2.764	432.29	9.765	2480	10.9	11.879	0.0039	1.612	0.0366	19.145	9.119
40	330.93	2.938	753.73	9.762	3293	17.0	11.837	0.0061	3.408	0.0446	40.343	8.203
50	491.31	3.257	1100.16	9.803	3976	18.3	11.773	0.0066	5.929	0.0430	69.805	7.038
60	731.74	3.500	1565.26	9.916	4753	28.6	11.671	0.0104	9.789	0.0457	114.245	6.405
70	1031.70	4.460	2147.95	10.065	5579	50.2	11.533	0.0096	15.397	0.0671	177.580	5.810
80	1316.94	6.788	2691.92	13.799	6198	54.3	11.364	0.0091	21.720	0.0879	246.834	5.335
90	1558.03	7.227	3140.39	17.514	6737	34.4	11.193	0.0097	28.330	0.1733	317.105	4.913
100	1787.38	8.050	3542.61	21.531	7136	40.1	11.004	0.0104	35.389	0.1703	389.411	4.590

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	52.89	3.992	172.98	15.536	1644	18.4	11.737	0.0040	0.636	0.0337	7.464	7.087
30	167.16	3.730	415.28	15.511	2449	11.3	11.716	0.0045	1.572	0.0343	18.413	9.079
40	319.41	4.255	728.53	15.513	3244	16.2	11.677	0.0042	3.309	0.0415	38.639	8.267
50	481.70	3.801	1074.16	15.520	3924	20.1	11.615	0.0059	5.844	0.0429	67.882	7.096
60	717.38	3.961	1525.60	15.617	4714	35.1	11.517	0.0084	9.616	0.0434	110.748	6.478
70	1020.20	5.207	2100.89	15.703	5513	48.2	11.383	0.0088	15.225	0.0540	173.313	5.886
80	1283.17	5.837	2623.14	16.835	6157	47.5	11.236	0.0096	21.287	0.0864	239.173	5.365
90	1547.05	5.718	3094.76	20.245	6653	45.2	11.070	0.0085	28.058	0.1062	310.591	4.981
100	1760.79	6.976	3483.35	19.684	7070	42.6	10.896	0.0090	35.053	0.1238	381.941	4.610

Plots for Measurement Results:

