

Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: Dualsky XM3040EG-12
KV: 1000
Magnet poles: 14
Propeler: CamZ 10x7 fold
Blade count: 2
Note: Battery 4S 2200mAh

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	123.61	2.000	395.24	2.350	2712	8.3	16.743	0.0035	1.191	0.0325	19.935	6.200
30	237.17	2.004	721.32	2.797	3762	19.4	16.676	0.0061	2.620	0.0453	43.690	5.429
40	464.11	1.941	1184.08	3.236	4975	37.0	16.558	0.0087	5.316	0.0465	88.030	5.272
50	674.11	1.946	1638.02	2.788	5958	44.3	16.390	0.0108	8.965	0.0811	146.933	4.588
60	902.98	2.439	2116.58	3.700	6711	64.4	16.172	0.0165	13.830	0.0463	223.656	4.037
70	1221.03	2.924	2830.18	4.030	7804	135.3	15.852	0.0207	20.909	0.1488	331.446	3.684
80	1537.19	6.874	3593.63	17.082	8828	55.8	15.450	0.0210	29.539	0.1594	456.378	3.368
90	1751.88	12.124	4114.40	25.108	9466	57.6	15.040	0.0203	37.990	0.1957	571.385	3.066
100	1908.30	14.518	4505.64	36.059	9884	58.6	14.617	0.0194	46.257	0.3538	676.156	2.822

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	116.45	6.471	383.24	9.448	2666	14.6	16.298	0.0057	1.183	0.0298	19.279	6.040
30	235.09	6.466	686.02	9.481	3683	14.0	16.241	0.0066	2.550	0.0387	41.418	5.676
40	442.14	6.507	1123.65	9.484	4860	21.1	16.141	0.0075	5.098	0.0503	82.281	5.374
50	643.91	6.473	1570.09	9.527	5810	41.0	15.995	0.0101	8.632	0.0510	138.067	4.664
60	865.96	6.660	2021.88	11.340	6619	51.8	15.800	0.0171	13.306	0.0681	210.237	4.119
70	1179.89	6.953	2742.33	10.471	7722	104.8	15.492	0.0202	20.399	0.1511	316.026	3.734
80	1484.29	10.168	3480.35	18.216	8703	48.1	15.112	0.0252	28.624	0.1682	432.581	3.431
90	1706.17	9.371	4027.27	20.903	9357	53.4	14.736	0.0222	37.110	0.1852	546.861	3.120
100	1873.12	16.975	4409.72	31.273	9799	65.0	14.360	0.0191	45.211	0.2994	649.237	2.885

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	75.54	2.173	311.63	6.772	2611	6.1	15.880	0.0065	1.154	0.0369	18.328	4.122
30	193.05	2.064	582.89	6.047	3601	16.7	15.827	0.0059	2.421	0.0449	38.324	5.037
40	372.34	2.078	980.35	6.220	4733	25.7	15.734	0.0074	4.893	0.0447	76.995	4.836
50	573.32	3.229	1392.87	6.379	5669	43.3	15.593	0.0117	8.269	0.0454	128.941	4.446
60	771.66	2.439	1784.17	6.275	6490	54.2	15.403	0.0109	12.915	0.0619	198.931	3.879
70	1075.86	5.284	2466.91	8.843	7628	106.5	15.142	0.0131	19.922	0.1485	301.670	3.566
80	1403.54	6.251	3134.38	9.407	8577	34.5	14.825	0.0167	28.143	0.1635	417.228	3.364
90	1627.87	6.907	3670.59	18.476	9252	43.6	14.499	0.0170	36.232	0.1740	525.334	3.099
100	1820.19	8.014	4291.22	24.116	9716	48.5	14.149	0.0174	44.364	0.3017	627.705	2.900

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	103.17	2.046	347.62	8.094	2566	14.4	15.570	0.0059	1.115	0.0365	17.357	5.944
30	209.34	2.027	625.12	8.106	3530	9.3	15.524	0.0060	2.339	0.0453	36.314	5.765
40	392.69	2.063	1026.64	8.343	4640	21.5	15.439	0.0073	4.711	0.0529	72.740	5.399
50	592.94	2.376	1448.78	8.203	5573	38.1	15.315	0.0089	8.058	0.0679	123.406	4.805
60	825.28	2.612	1918.49	9.601	6406	55.3	15.151	0.0125	12.631	0.0572	191.364	4.313
70	1127.43	3.590	2610.48	8.670	7540	124.1	14.917	0.0137	19.438	0.1218	289.953	3.888
80	1426.68	4.266	3345.28	11.649	8506	44.1	14.632	0.0126	27.576	0.1774	403.497	3.536
90	1646.36	7.595	3877.28	19.062	9179	49.5	14.328	0.0144	35.749	0.1435	512.211	3.214
100	1817.94	9.610	4286.10	28.045	9651	44.4	14.014	0.0118	43.912	0.2411	615.388	2.954

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	106.50	1.758	341.70	3.251	2532	7.2	15.317	0.0039	1.109	0.0346	16.982	6.271
30	212.54	1.763	623.23	3.300	3462	14.3	15.273	0.0040	2.312	0.0358	35.312	6.019
40	382.68	1.879	1020.23	4.257	4577	16.7	15.198	0.0069	4.636	0.0456	70.457	5.431
50	576.02	1.834	1428.11	3.377	5481	29.8	15.086	0.0068	7.886	0.0526	118.968	4.842
60	806.98	1.858	1907.33	4.112	6315	54.4	14.929	0.0137	12.481	0.0688	186.329	4.331
70	1115.43	3.552	2571.04	4.388	7453	121.0	14.699	0.0115	19.172	0.1362	281.812	3.958
80	1407.58	5.772	3271.95	12.462	8416	48.5	14.428	0.0142	27.034	0.1328	390.058	3.609
90	1632.65	5.854	3825.27	14.037	9090	32.5	14.149	0.0094	35.248	0.1653	498.714	3.274
100	1802.46	11.359	4244.16	22.225	9594	45.1	13.859	0.0133	43.435	0.2424	601.968	2.994

Plots for Measurement Results:

