

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	159.41	5.113	338.73	4.161	3131	26.5	16.729	0.0052	1.165	0.0316	19.487	8.180
30	294.26	4.977	566.58	3.978	4160	21.2	16.674	0.0058	2.288	0.0349	38.144	7.714
40	476.42	4.998	881.78	3.857	5222	28.1	16.592	0.0074	4.111	0.0524	68.204	6.985
50	717.43	5.335	1260.18	4.099	6314	38.1	16.460	0.0104	7.075	0.0539	116.455	6.161
60	989.63	5.182	1692.67	4.536	7211	77.5	16.269	0.0123	11.138	0.0723	181.206	5.461
70	1336.68	5.278	2324.08	4.415	8404	63.9	15.990	0.0171	17.166	0.1320	274.492	4.870
80	1725.44	9.276	3028.50	11.701	9521	47.2	15.621	0.0220	24.969	0.1532	390.035	4.424
90	2045.16	8.567	3599.02	16.974	10293	57.6	15.230	0.0199	33.091	0.1715	503.969	4.058
100	2280.38	16.981	3992.42	32.837	10872	61.3	14.841	0.0205	40.984	0.2595	608.246	3.749

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	151.08	7.539	323.18	7.178	3079	33.3	16.332	0.0054	1.126	0.0220	18.393	8.214
30	280.78	7.435	539.86	6.947	4085	13.0	16.285	0.0056	2.189	0.0220	35.643	7.877
40	455.48	7.565	835.37	7.001	5104	34.6	16.215	0.0071	3.943	0.0499	63.938	7.124
50	673.78	7.485	1196.46	6.986	6187	52.6	16.097	0.0089	6.787	0.0389	109.245	6.168
60	948.41	7.652	1611.46	7.153	7100	48.4	15.932	0.0135	10.804	0.0535	172.125	5.510
70	1303.28	7.698	2251.46	7.246	8319	93.1	15.696	0.0156	16.711	0.1458	262.304	4.969
80	1676.87	7.894	2923.02	9.722	9400	42.4	15.373	0.0200	24.255	0.1543	372.871	4.497
90	1985.63	16.218	3471.74	24.793	10176	51.8	14.997	0.0222	32.148	0.2100	482.134	4.118
100	2227.70	17.436	3883.16	24.443	10755	54.6	14.615	0.0206	39.979	0.2703	584.273	3.813

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	144.73	3.836	308.70	8.267	3012	27.4	15.941	0.0045	1.102	0.0311	17.573	8.236
30	269.20	3.766	518.34	8.184	4008	16.2	15.900	0.0062	2.159	0.0300	34.328	7.842
40	432.39	3.822	798.99	8.091	4990	39.2	15.824	0.0087	3.784	0.0398	59.870	7.222
50	642.68	3.907	1150.17	8.119	6045	51.3	15.714	0.0091	6.546	0.0523	102.868	6.248
60	918.61	3.947	1557.31	8.492	6991	48.1	15.560	0.0115	10.463	0.0627	162.811	5.642
70	1267.35	3.951	2182.03	8.208	8178	125.4	15.324	0.0154	16.204	0.1340	248.308	5.104
80	1620.85	5.799	2822.36	10.745	9261	46.7	15.035	0.0158	23.601	0.2135	354.826	4.568
90	1920.78	7.571	3343.34	18.634	10049	47.7	14.727	0.0196	31.178	0.1612	459.171	4.183
100	2182.82	8.990	3807.82	19.873	10647	52.8	14.384	0.0186	39.264	0.1741	564.789	3.865

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	144.09	3.845	305.13	7.311	2973	29.8	15.736	0.0061	1.072	0.0288	16.868	8.542
30	263.53	3.744	507.55	6.910	3966	21.9	15.693	0.0063	2.122	0.0312	33.305	7.913
40	425.56	3.711	777.89	6.825	4930	33.0	15.621	0.0065	3.678	0.0598	57.462	7.406
50	630.32	3.777	1121.14	7.002	5971	53.3	15.506	0.0111	6.381	0.0518	98.943	6.371
60	894.55	4.562	1521.27	6.849	6916	52.7	15.342	0.0137	10.200	0.0612	156.497	5.716
70	1242.13	4.786	2135.28	7.186	8086	80.2	15.123	0.0139	15.992	0.0941	241.856	5.136
80	1585.63	5.557	2767.87	8.152	9176	45.8	14.841	0.0169	23.043	0.1440	341.971	4.637
90	1898.57	4.672	3295.39	10.138	9978	43.1	14.549	0.0133	30.664	0.0976	446.131	4.256
100	2143.24	12.081	3743.44	22.512	10589	45.8	14.228	0.0169	38.550	0.1774	548.479	3.908

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	140.48	2.006	296.06	8.887	2934	27.3	15.454	0.0043	1.056	0.0304	16.322	8.607
30	256.04	1.537	492.72	8.533	3904	12.4	15.414	0.0055	2.060	0.0221	31.748	8.065
40	413.35	1.509	747.28	8.471	4845	20.9	15.357	0.0056	3.593	0.0306	55.184	7.490
50	612.44	2.088	1084.83	8.551	5877	30.5	15.257	0.0060	6.227	0.0594	95.010	6.446
60	879.47	1.991	1486.01	8.629	6850	38.1	15.118	0.0107	10.012	0.0993	151.360	5.810
70	1220.43	4.103	2094.01	8.633	8041	122.2	14.915	0.0107	15.655	0.1075	233.488	5.227
80	1556.90	6.800	2711.15	17.556	9095	36.3	14.668	0.0116	22.693	0.1350	332.853	4.677
90	1858.58	3.603	3228.44	10.706	9914	49.6	14.395	0.0152	30.099	0.1459	433.294	4.289
100	2123.84	8.997	3680.62	17.231	10511	46.1	14.084	0.0125	37.987	0.2169	535.017	3.970

Plots for Measurement Results:

