

Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: T-Motor MN2206-13
KV: 200
Magnet poles: 14
Propeler: HQProp 6x4x3
Blade count: 2
Note:

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	39.19	2.429	77.87	2.069	4139	9.0	12.540	0.0049	0.334	0.0066	4.188	9.358
25	63.13	2.428	113.97	2.063	5091	18.5	12.533	0.0039	0.563	0.0149	7.056	8.947
30	90.86	2.428	155.83	2.061	5990	20.1	12.522	0.0048	0.881	0.0139	11.030	8.238
35	121.94	2.435	202.29	2.065	6832	35.1	12.503	0.0057	1.290	0.0155	16.126	7.562
40	155.11	2.459	253.28	2.091	7698	56.3	12.483	0.0056	1.773	0.0244	22.134	7.008
45	190.38	2.430	303.69	2.075	8403	60.6	12.461	0.0051	2.141	0.0153	26.684	7.135
50	226.51	2.440	357.01	2.081	9148	56.7	12.434	0.0052	2.370	0.0188	29.473	7.685
55	266.22	2.435	414.17	2.075	9905	98.2	12.401	0.0052	2.633	0.0274	32.652	8.153
60	306.90	2.435	477.78	2.104	10630	77.9	12.363	0.0056	3.084	0.0359	38.122	8.050
65	352.62	2.464	544.59	2.242	11434	94.0	12.316	0.0043	3.577	0.0413	44.056	8.004
70	398.33	2.457	607.20	2.125	12107	144.7	12.267	0.0069	4.485	0.0534	55.021	7.240
75	445.82	2.684	676.06	2.293	12806	113.0	12.210	0.0045	5.688	0.0895	69.448	6.419
80	492.65	2.594	745.45	2.718	13396	72.9	12.150	0.0073	7.031	0.1004	85.431	5.767
90	595.66	2.717	893.27	2.394	14676	176.4	12.029	0.0062	10.742	0.0854	129.216	4.610
100	690.77	3.515	1027.00	3.661	15797	88.7	11.897	0.0065	14.502	0.0430	172.531	4.004

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	37.82	2.059	75.69	2.378	4106	7.1	12.407	0.0044	0.328	0.0085	4.069	9.295
25	60.85	2.061	110.74	2.397	5044	21.1	12.400	0.0038	0.557	0.0132	6.910	8.806
30	87.79	2.060	151.43	2.380	5911	18.9	12.387	0.0038	0.865	0.0129	10.717	8.192
35	117.61	2.064	197.02	2.381	6757	37.3	12.373	0.0057	1.254	0.0228	15.509	7.583
40	149.16	2.065	245.02	2.395	7579	32.2	12.351	0.0052	1.734	0.0251	21.412	6.966
45	182.30	2.063	294.28	2.453	8329	47.1	12.328	0.0044	2.060	0.0200	25.399	7.177
50	217.87	2.091	345.98	2.393	9054	53.6	12.300	0.0041	2.243	0.0129	27.593	7.896
55	257.90	2.069	405.18	2.384	9802	61.1	12.268	0.0021	2.527	0.0245	31.007	8.317
60	295.87	2.102	466.41	2.427	10510	89.8	12.231	0.0051	2.924	0.0300	35.757	8.274
65	340.13	2.075	531.59	2.446	11200	103.7	12.184	0.0054	3.415	0.0538	41.610	8.174
70	387.74	2.162	599.89	2.627	11899	115.4	12.137	0.0048	4.290	0.0560	52.065	7.447
75	435.09	2.117	667.35	2.500	12630	95.9	12.082	0.0048	5.444	0.0426	65.779	6.614
80	483.29	2.216	737.16	2.759	13296	79.0	12.020	0.0051	6.889	0.0845	82.801	5.837
90	583.70	2.705	880.30	3.084	14610	166.2	11.904	0.0053	10.632	0.0641	126.566	4.612
100	678.73	3.105	1012.08	5.042	15677	74.3	11.781	0.0063	14.421	0.0622	169.893	3.995

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	41.19	3.674	74.83	2.311	4068	11.6	12.285	0.0027	0.321	0.0103	3.948	10.433
25	63.94	3.675	109.69	2.309	4995	14.8	12.277	0.0030	0.551	0.0117	6.762	9.455
30	90.68	3.675	149.91	2.314	5881	24.7	12.266	0.0039	0.850	0.0109	10.425	8.698
35	119.57	3.677	194.23	2.319	6689	32.6	12.250	0.0023	1.239	0.0167	15.176	7.879
40	150.58	3.681	240.43	2.363	7522	43.1	12.231	0.0025	1.710	0.0202	20.921	7.198
45	183.49	3.686	289.38	2.335	8222	42.6	12.209	0.0050	2.065	0.0175	25.215	7.277
50	218.58	3.687	341.00	2.325	8987	60.5	12.181	0.0048	2.281	0.0178	27.790	7.865
55	255.08	3.687	397.11	2.338	9746	74.1	12.149	0.0046	2.550	0.0232	30.979	8.234
60	293.99	3.680	457.18	2.315	10478	98.5	12.111	0.0043	2.976	0.0270	36.043	8.157
65	339.32	3.699	523.76	2.411	11169	63.6	12.066	0.0041	3.491	0.0759	42.128	8.054
70	385.28	3.680	588.57	2.333	11853	87.7	12.018	0.0045	4.342	0.0436	52.183	7.383
75	430.91	3.699	654.62	2.375	12575	54.9	11.968	0.0053	5.491	0.0698	65.718	6.557
80	478.97	3.837	726.14	2.553	13194	122.9	11.905	0.0042	6.946	0.0853	82.697	5.792
90	581.29	4.046	870.73	2.970	14495	120.1	11.798	0.0048	10.538	0.0603	124.329	4.675
100	676.20	3.883	1001.21	3.129	15558	67.9	11.669	0.0043	14.386	0.0378	167.870	4.028

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	37.01	6.085	72.70	3.264	4033	12.8	12.185	0.0041	0.313	0.0089	3.817	9.695
25	59.99	6.083	107.17	3.272	4966	20.4	12.176	0.0033	0.541	0.0133	6.586	9.110
30	85.19	6.082	145.94	3.260	5839	22.5	12.167	0.0038	0.825	0.0140	10.041	8.483
35	113.24	6.083	189.37	3.272	6668	27.0	12.152	0.0042	1.219	0.0161	14.818	7.642
40	143.71	6.085	235.78	3.278	7456	28.3	12.131	0.0042	1.661	0.0244	20.154	7.131
45	176.98	6.086	284.49	3.278	8199	40.3	12.111	0.0051	2.057	0.0179	24.912	7.104
50	210.95	6.086	334.38	3.273	8923	47.5	12.085	0.0049	2.279	0.0213	27.546	7.658
55	249.57	6.088	392.32	3.286	9669	83.7	12.051	0.0047	2.541	0.0263	30.620	8.151
60	286.53	6.084	450.11	3.269	10347	66.8	12.013	0.0030	2.978	0.0316	35.782	8.008
65	332.27	6.106	516.63	3.339	11176	57.3	11.972	0.0065	3.591	0.0619	42.992	7.729
70	378.25	6.092	582.15	3.305	11796	67.3	11.920	0.0045	4.297	0.0518	51.223	7.384
75	423.21	6.102	646.30	3.303	12439	126.0	11.864	0.0070	5.462	0.0829	64.808	6.530
80	470.28	6.251	716.07	3.558	13135	139.6	11.803	0.0046	6.954	0.0532	82.078	5.730
90	567.67	6.177	855.83	3.568	14436	95.8	11.691	0.0080	10.462	0.0606	122.314	4.641
100	660.91	6.296	986.11	4.126	15465	54.8	11.556	0.0068	14.274	0.0249	164.952	4.007

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	31.70	2.022	71.28	3.979	3985	11.4	12.058	0.0045	0.303	0.0098	3.658	8.668
25	53.57	2.021	105.01	3.977	4919	23.3	12.049	0.0042	0.529	0.0126	6.374	8.404
30	79.43	2.023	144.30	3.985	5791	23.8	12.039	0.0049	0.809	0.0155	9.736	8.159
35	107.69	2.025	187.36	3.983	6619	25.7	12.021	0.0040	1.197	0.0197	14.390	7.483
40	138.03	2.033	233.21	3.995	7378	36.9	12.000	0.0075	1.644	0.0244	19.730	6.996
45	170.13	2.031	281.28	4.003	8121	58.4	11.978	0.0031	2.062	0.0164	24.698	6.888
50	203.61	2.088	329.93	4.031	8871	52.4	11.951	0.0047	2.303	0.0174	27.527	7.397
55	240.36	2.062	385.02	3.997	9572	47.2	11.915	0.0063	2.602	0.0309	31.006	7.752
60	276.90	2.060	442.95	3.995	10287	84.9	11.879	0.0041	3.017	0.0308	35.836	7.727
65	320.46	2.049	506.21	3.993	11099	133.1	11.830	0.0057	3.595	0.0509	42.528	7.535
70	366.43	2.098	572.82	4.015	11713	147.8	11.782	0.0060	4.377	0.0342	51.574	7.105
75	409.87	2.039	635.52	3.998	12332	152.5	11.728	0.0067	5.547	0.0450	65.058	6.300
80	457.96	2.157	704.11	4.126	12979	77.5	11.669	0.0045	6.923	0.0821	80.787	5.669
90	556.67	3.134	843.73	4.855	14240	87.0	11.560	0.0059	10.405	0.0501	120.286	4.628
100	645.73	2.372	973.85	4.368	15385	87.1	11.440	0.0067	14.194	0.0335	162.381	3.977

Plots for Measurement Results:

