Tool info

Serial API:
Board:
Firmware:
Commit:

Measurement info

Motor: T-Motor MT2212-16
KV: 750
Magnet poles: 14
Propeler: carbon 10x3.3
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	42.59	0.974	87.16	3.292	2200	0.0	16.716	0.0057	0.170	0.0063	2.839	15.001
25	71.52	1.003	133.15	3.308	2743	-nan(ind)	16.709	0.0044	0.286	0.0063	4.786	14.944
30	100.66	0.981	186.01	3.294	3260	5.7	16.700	0.0043	0.440	0.0086	7.353	13.689
35	141.06	0.993	246.61	3.307	3779	7.1	16.688	0.0054	0.651	0.0078	10.867	12.980
40	179.69	0.976	311.64	3.294	4259	11.7	16.668	0.0066	0.898	0.0098	14.970	12.004
45	224.30	1.013	385.40	3.300	4729	12.9	16.645	0.0041	1.208	0.0104	20.100	11.159
50	273.70	1.010	458.84	3.381	5190	20.4	16.612	0.0052	1.561	0.0179	25.938	10.552
55	325.85	1.039	542.17	3.305	5619	18.6	16.582	0.0071	1.989	0.0153	32.974	9.882
60	377.01	1.278	626.28	3.421	6052	29.2	16.539	0.0062	2.479	0.0183	41.002	9.195
65	431.27	1.084	717.99	3.471	6467	22.5	16.497	0.0077	3.024	0.0205	49.879	8.646
70	476.46	1.207	809.36	3.414	6880	24.1	16.448	0.0057	3.620	0.0209	59.540	8.002
75	525.45	1.026	905.74	3.499	7254	30.6	16.386	0.0056	4.327	0.0233	70.899	7.411
80	570.30	1.154	998.08	3.630	7679	44.3	16.319	0.0067	5.084	0.0318	82.963	6.874
90	657.34	1.871	1213.19	3.529	8415	39.5	16.207	0.0088	6.866	0.0306	111.269	5.908
100	718.76	1.051	1416.99	4.319	9125	45.0	16.071	0.0097	8.839	0.0307	142.045	5.060

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	43.38	1.317	83.89	3.567	2157	0.0	16.534	0.0052	0.161	0.0063	2.656	16.335
25	71.06	1.324	130.30	3.598	2708	7.1	16.526	0.0060	0.270	0.0080	4.467	15.908
30	95.51	1.318	182.96	3.572	3221	7.1	16.516	0.0053	0.425	0.0079	7.022	13.601
35	137.44	1.330	241.83	3.581	3727	11.3	16.503	0.0044	0.622	0.0114	10.270	13.383
40	176.43	1.321	305.17	3.571	4217	10.9	16.484	0.0039	0.868	0.0103	14.308	12.331
45	218.10	1.326	375.97	3.569	4675	15.2	16.463	0.0059	1.174	0.0098	19.325	11.286
50	264.59	1.462	447.63	3.671	5120	15.5	16.437	0.0053	1.527	0.0146	25.092	10.545
55	312.26	1.738	528.74	3.596	5552	14.2	16.406	0.0040	1.936	0.0159	31.762	9.831
60	367.08	1.402	614.54	3.589	5982	21.6	16.367	0.0054	2.425	0.0139	39.685	9.250
65	423.27	1.372	701.78	3.658	6399	28.0	16.323	0.0057	2.962	0.0227	48.345	8.755
70	473.63	1.355	791.52	3.746	6804	23.2	16.272	0.0065	3.552	0.0176	57.806	8.193
75	533.37	1.695	890.06	3.661	7192	44.2	16.219	0.0070	4.240	0.0180	68.763	7.757
80	585.10	1.418	987.19	3.994	7586	35.2	16.155	0.0069	4.996	0.0232	80.715	7.249
90	659.68	1.398	1188.15	4.117	8353	39.2	16.042	0.0100	6.710	0.0310	107.645	6.128
100	718.07	1.460	1391.26	4.262	9023	48.7	15.909	0.0098	8.672	0.0369	137.969	5.205

Measurement Results 3:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		[G/W]
20	42.11	1.466	80.53	4.560	2143	-nan(ind)	16.363	0.0044	0.160	0.0061	2.615	16.103
25	69.51	1.459	125.60	4.552	2671	0.0	16.354	0.0053	0.270	0.0073	4.419	15.729
30	98.57	1.689	178.73	4.565	3191	6.9	16.345	0.0051	0.419	0.0061	6.852	14.385
35	131.51	1.459	236.93	4.553	3692	7.1	16.329	0.0058	0.620	0.0087	10.125	12.988
40	172.01	1.450	298.91	4.587	4174	10.1	16.310	0.0062	0.856	0.0096	13.964	12.318
45	213.15	1.451	368.24	4.588	4624	16.3	16.287	0.0041	1.155	0.0114	18.806	11.334
50	259.96	1.461	439.55	4.622	5085	17.6	16.261	0.0054	1.510	0.0130	24.547	10.590
55	310.26	1.506	519.03	4.582	5519	24.9	16.228	0.0070	1.919	0.0146	31.139	9.964
60	363.27	1.487	604.79	4.577	5935	29.6	16.189	0.0053	2.402	0.0159	38.882	9.343
65	413.24	1.674	687.07	4.851	6356	24.7	16.147	0.0066	2.905	0.0189	46.908	8.810
70	468.96	1.550	777.72	4.687	6765	26.6	16.098	0.0050	3.500	0.0250	56.350	8.322
75	524.26	1.817	875.88	4.619	7164	30.6	16.048	0.0069	4.185	0.0202	67.170	7.805
80	579.71	1.703	972.70	4.685	7552	40.0	15.989	0.0056	4.922	0.0247	78.697	7.366
90	663.31	1.522	1178.04	4.772	8309	36.0	15.881	0.0093	6.656	0.0325	105.707	6.275
100	718.57	1.553	1374.98	5.593	8988	45.8	15.754	0.0104	8.575	0.0317	135.097	5.319

Measurement Results 4:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		[G/W]
20	41.05	1.721	79.64	3.911	2114	-nan(ind)	16.237	0.0036	0.159	0.0061	2.578	15.922
25	68.27	1.726	123.38	3.912	2651	7.1	16.229	0.0047	0.263	0.0081	4.270	15.989
30	94.51	1.724	174.11	3.945	3161	6.3	16.220	0.0065	0.416	0.0082	6.755	13.992
35	130.08	1.726	230.57	3.919	3656	12.2	16.207	0.0043	0.609	0.0097	9.872	13.177
40	171.15	1.778	293.17	3.925	4131	10.0	16.191	0.0042	0.846	0.0081	13.691	12.501
45	210.42	1.746	361.01	3.936	4579	14.7	16.169	0.0047	1.133	0.0128	18.319	11.486
50	254.96	1.730	430.53	3.924	5035	15.6	16.143	0.0062	1.478	0.0137	23.864	10.684
55	305.00	1.793	510.02	3.936	5465	14.5	16.110	0.0051	1.892	0.0159	30.478	10.007
60	355.27	1.768	591.27	3.919	5893	23.7	16.070	0.0042	2.349	0.0199	37.756	9.410
65	409.70	1.817	675.90	3.976	6288	25.5	16.025	0.0075	2.871	0.0225	46.015	8.904
70	461.19	1.860	764.90	3.961	6710	21.5	15.972	0.0057	3.448	0.0236	55.071	8.374
75	518.72	2.838	862.87	4.424	7095	31.4	15.908	0.0095	4.139	0.0282	65.841	7.878
80	572.05	1.802	953.84	4.011	7458	30.4	15.834	0.0069	4.827	0.0220	76.431	7.485
90	663.49	1.935	1150.31	4.191	8241	39.2	15.706	0.0120	6.513	0.0375	102.294	6.486
100	717.59	1.741	1347.10	4.290	8866	45.0	15.561	0.0100	8.403	0.0297	130.765	5.488

Measurement Results 5:

Output	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff
[%]	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		[G/W]
20	39.53	2.387	81.86	5.009	2100	0.0	16.018	0.0041	0.156	0.0074	2.497	15.827
25	66.35	2.383	124.15	5.020	2629	0.0	16.006	0.0061	0.264	0.0085	4.220	15.723
30	90.45	2.384	175.21	5.020	3133	6.7	15.999	0.0045	0.404	0.0063	6.456	14.009
35	124.93	2.378	229.58	5.023	3623	7.0	15.984	0.0048	0.595	0.0082	9.512	13.134
40	165.30	2.391	290.51	5.022	4093	7.1	15.967	0.0060	0.831	0.0095	13.266	12.461
45	204.11	2.382	357.21	5.026	4529	15.6	15.940	0.0057	1.119	0.0125	17.833	11.446
50	251.89	2.387	428.49	5.035	4978	16.5	15.912	0.0051	1.458	0.0121	23.201	10.857
55	297.68	2.484	502.89	5.130	5410	15.9	15.875	0.0047	1.854	0.0160	29.438	10.112
60	346.60	2.426	583.00	5.074	5834	20.9	15.836	0.0062	2.299	0.0179	36.405	9.521
65	399.08	2.405	664.72	5.034	6229	22.2	15.787	0.0064	2.808	0.0236	44.338	9.001
70	449.64	2.445	751.78	5.090	6631	25.6	15.739	0.0055	3.379	0.0276	53.180	8.455
75	503.35	2.469	846.97	5.450	7029	28.5	15.679	0.0085	4.046	0.0246	63.437	7.935
80	561.12	2.432	942.16	5.068	7395	30.1	15.615	0.0073	4.761	0.0196	74.341	7.548
90	659.25	2.398	1138.68	5.196	8143	41.4	15.510	0.0066	6.435	0.0257	99.812	6.605
100	713.64	2.409	1329.93	5.670	8808	41.3	15.389	0.0095	8.275	0.0336	127.339	5.604

Plots for Measurement Results: