



M8108 Light

基础参数 Specification

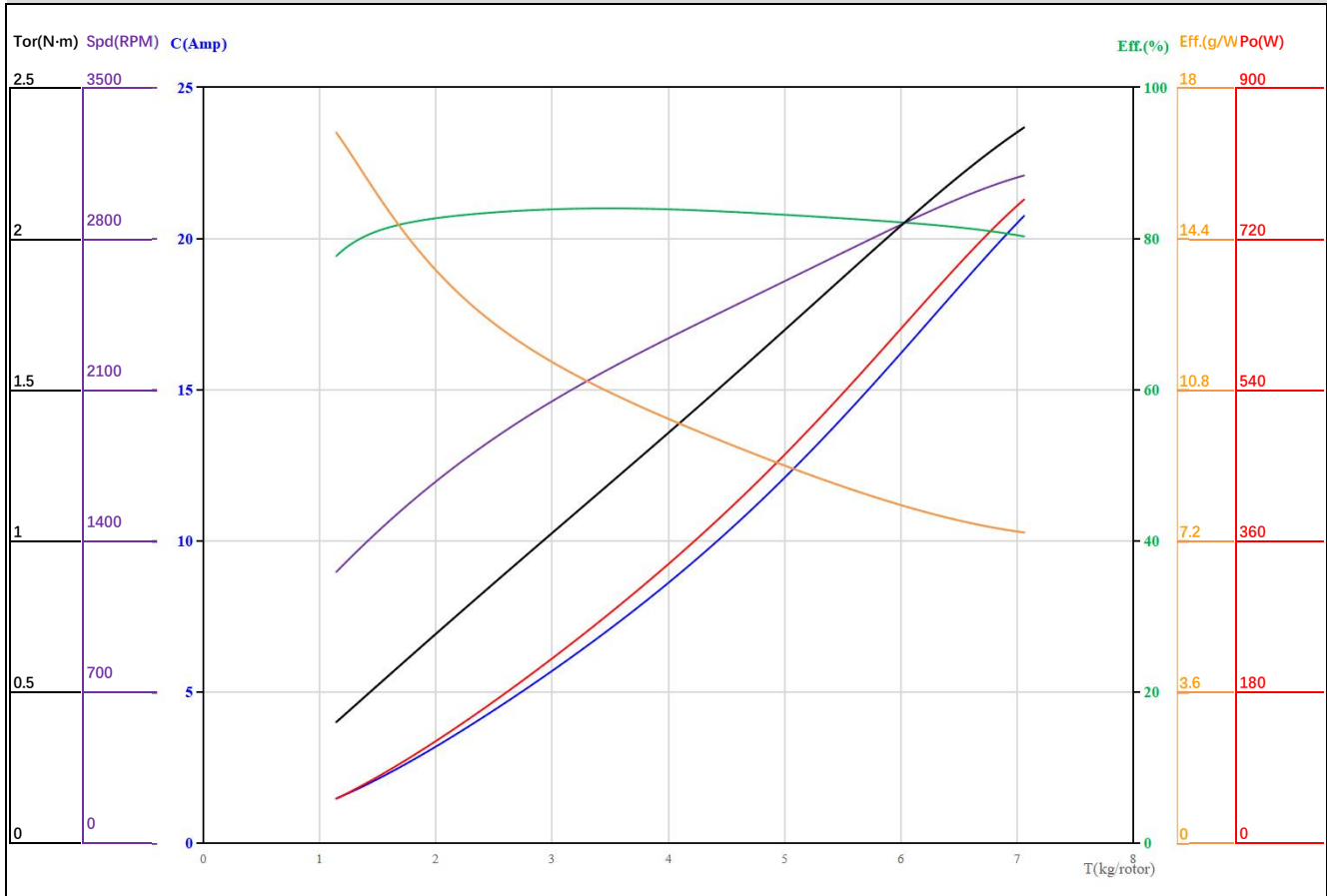
产品型号 Model	M8108 Light-85/100/150KV	防尘防水等级 Protection level	IPX5
电机尺寸 Motor Size	Φ87.1*H25.4mm	槽极数 Slot& Pole	36槽42极 36N 42P
定子尺寸 Stator Size	Φ81*H8mm	电机整体动平衡标准 Dynamic balance	≤10mg
定子工艺 Stator process	高品质硅钢片，防锈处理，耐180°C高温涂覆 High standard silicon steel sheet, rust proof, 180°C high temperature resistance paint-coat	轴承型号 Bearing	高品质防水轴承 Water proof bearing
漆包线等级 Enamelled wire	200°C	出轴轴径 Motor axle diameter	/
磁铁等级 Magnet	180°C	桨叶安装孔尺寸 Props mounting dimensions	4*M3@D20mm, 4*M4@D23mm
线圈绝缘测试 Isolation test	500V交流耐压测试 500V AC high voltage resistance test	电机安装孔尺寸 Motor mounting dimensions	4*M4@D36mm
额定输入功率 Rated power input	330W	额定输出功率 Rated power output	280.5W

技术参数 Specification

KV值 KV	85KV	100KV	150KV
额定电压 Battery(LiPo)	LiPo-12S	LiPo-12S	LiPo-6S
空载电流 No-load current	0.91A	1.19A	1.41A
最大电流(非密闭环境温度 ≤25 °C) Maximum current (Non-hermetic Ambient Temperature ≤ 25°C)	20.8A	33.8A	27.8A
最大功率 Max power	950W	1550W	640W
最大拉力 Max thrust	7.2kg	9.2kg	5.5kg
相间内阻 Resistance	239.5mΩ	165.2mΩ	82.8mΩ
出线规格 Wire Size	16AWG	16AWG	16AWG
出线长度 Wire length	100mm	100mm	100mm
电机重量(含线) Weight (With wire)	237.4g	238.3g	242.8g

85KV+MSC 29x9.5 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

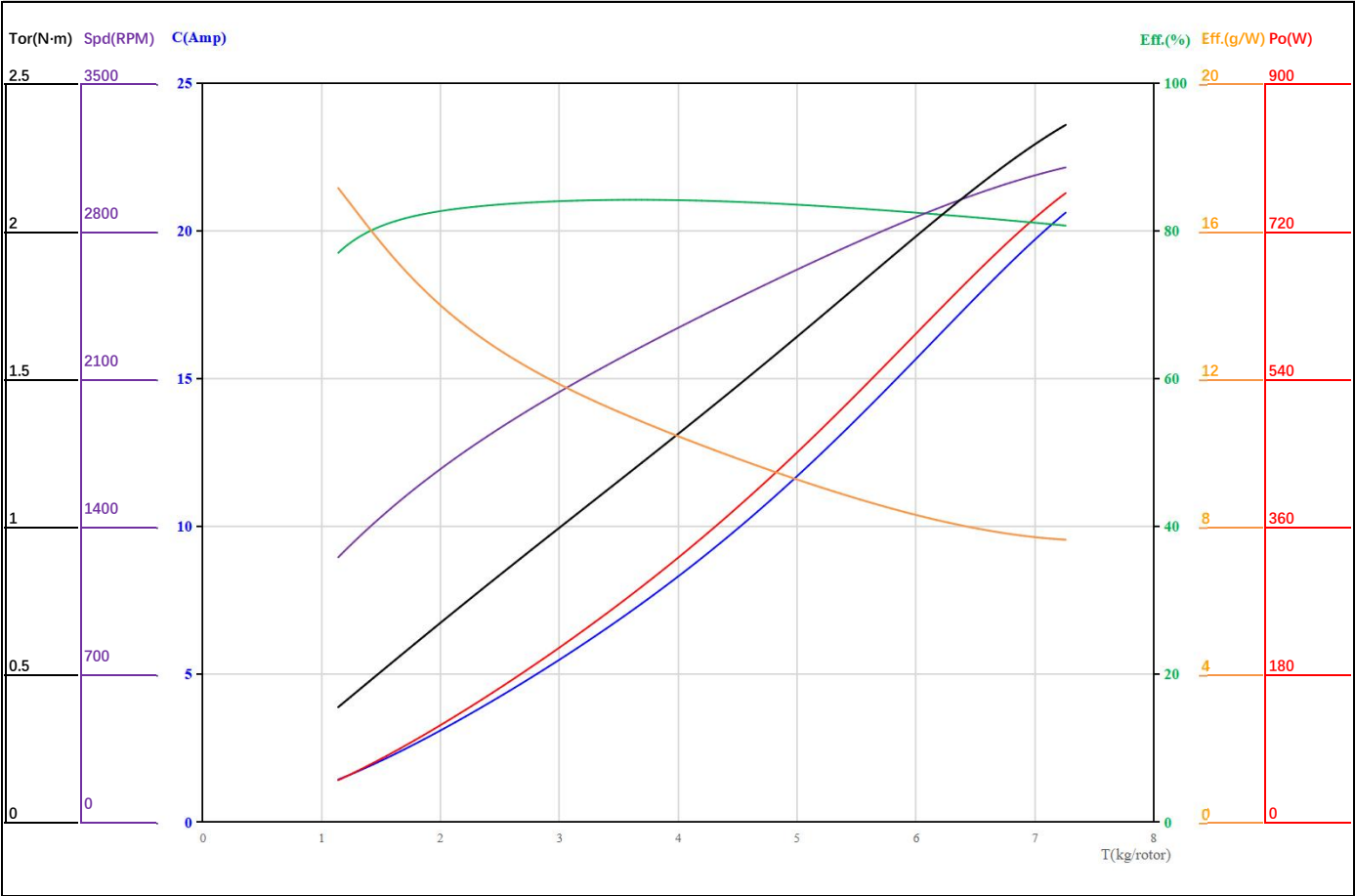
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 29x9.5	33%	1171	1.5	69.6	1270	16.8	0.41	54.3	66.1
		35%	1285	1.7	78.6	1331	16.3	0.45	62.4	
		37%	1413	1.9	89.4	1398	15.8	0.49	71.9	
		39%	1552	2.2	101.9	1467	15.2	0.54	82.8	
		42%	1778	2.7	123.7	1575	14.4	0.62	101.6	
		45%	2021	3.2	148.8	1683	13.6	0.70	123.1	
		48%	2279	3.8	176.9	1789	12.9	0.79	147.1	
		51%	2549	4.5	207.6	1891	12.3	0.88	173.4	
		54%	2828	5.2	240.8	1989	11.7	0.97	201.7	
		57%	3117	6.0	276.4	2083	11.3	1.06	232.0	
		60%	3412	6.8	314.6	2172	10.8	1.16	264.2	
		63%	3715	7.7	355.5	2259	10.5	1.26	298.5	
		66%	4024	8.7	399.5	2344	10.1	1.36	335.0	
		69%	4339	9.7	446.8	2428	9.7	1.47	373.8	
		72%	4657	10.8	497.7	2512	9.4	1.58	415.2	
		75%	4977	12.0	552.1	2596	9.0	1.69	459.1	
		78%	5296	13.2	609.5	2680	8.7	1.80	505.0	
		81%	5611	14.5	669.0	2763	8.4	1.91	552.3	
		84%	5917	15.8	729.0	2843	8.1	2.01	599.5	
		87%	6208	17.1	787.3	2916	7.9	2.11	644.7	
		90%	6476	18.3	841.4	2979	7.7	2.20	685.7	
		100%	7060	20.7	954.7	3092	7.4	2.37	766.4	

*以上数据为好盈实验室于室温 25℃、海平面高度，变化油门输入调节测得，电机温度为65%油门运行10分钟数据，仅供参考。

*The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor temperature is measured after running for 10 minutes at 65% throttle, for reference only.

85KV+MSC 30x9.8 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

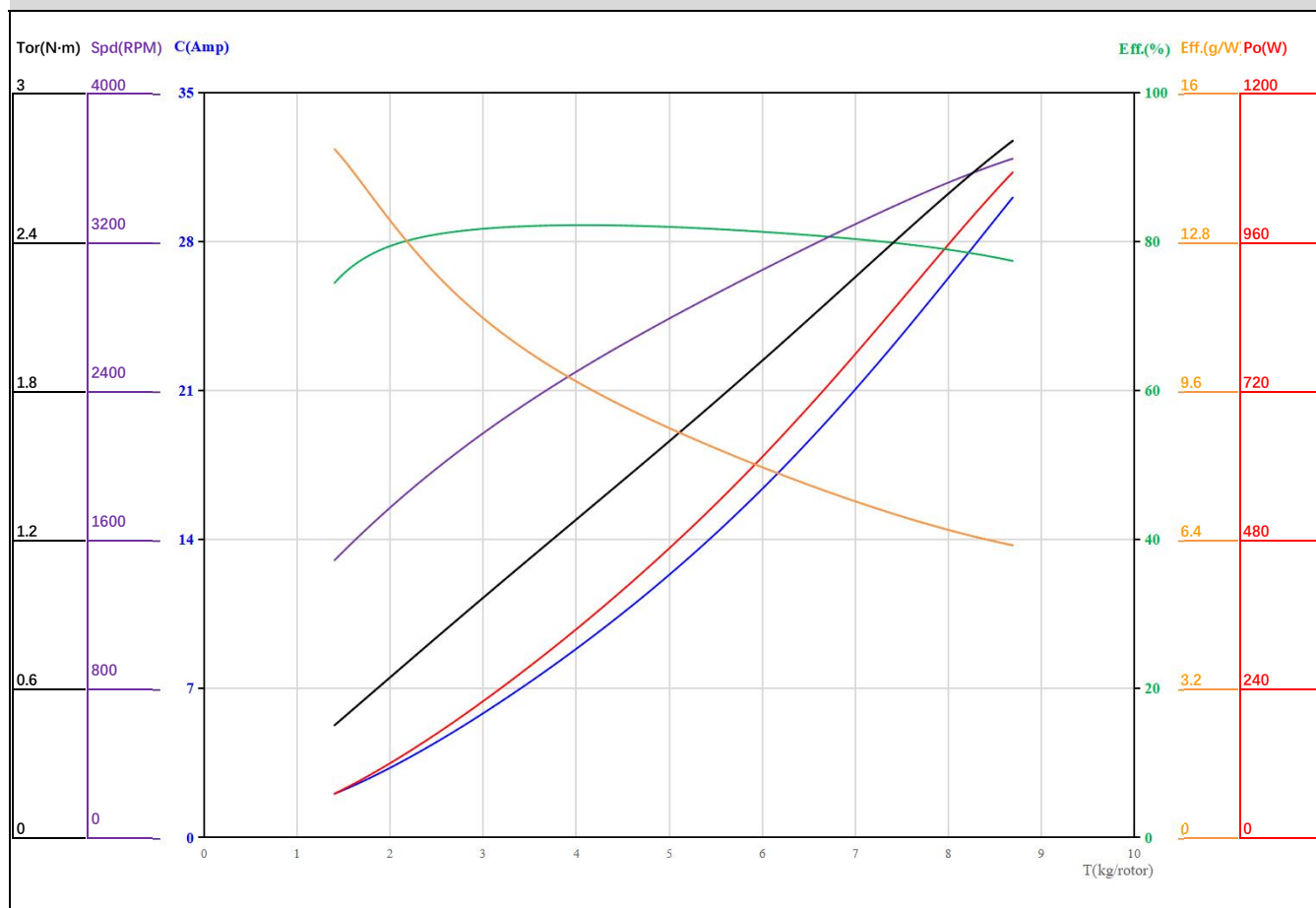
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 30x9.8	33%	1164	1.5	68.2	1269	17.1	0.40	52.8	69.2
		35%	1274	1.7	76.7	1330	16.6	0.43	60.4	
		37%	1402	1.9	87.2	1397	16.1	0.48	69.8	
		39%	1545	2.2	99.6	1468	15.5	0.52	80.7	
		42%	1780	2.6	121.4	1578	14.7	0.60	99.6	
		45%	2035	3.2	146.4	1688	13.9	0.69	121.2	
		48%	2302	3.8	174.2	1794	13.2	0.77	145.2	
		51%	2578	4.4	204.4	1895	12.6	0.86	171.1	
		54%	2861	5.1	236.7	1993	12.1	0.95	198.7	
		57%	3149	5.9	271.1	2087	11.6	1.04	228.1	
		60%	3443	6.7	307.8	2178	11.2	1.14	259.2	
		63%	3741	7.5	347.0	2267	10.8	1.23	292.3	
		66%	4044	8.5	389.2	2355	10.4	1.33	327.6	
		69%	4353	9.4	434.7	2442	10.0	1.43	365.4	
		72%	4668	10.5	484.0	2529	9.6	1.53	405.8	
		75%	4988	11.7	537.0	2615	9.3	1.64	448.8	
		78%	5312	12.9	593.5	2699	8.9	1.75	494.3	
		81%	5636	14.2	652.9	2781	8.6	1.86	541.4	
		84%	5958	15.5	713.5	2857	8.4	1.97	589.0	
		87%	6271	16.8	773.3	2927	8.1	2.07	635.3	
		90%	6567	18.0	829.3	2988	7.9	2.17	678.0	
		100%	7258	20.6	949.1	3102	7.6	2.36	766.4	

*以上数据为好盈实验室于室温 25℃、海平面高度，变化油门输入调节测得，电机温度为65%油门运行10分钟数据，仅供参考。

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100KV+MSC 28x9.2 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

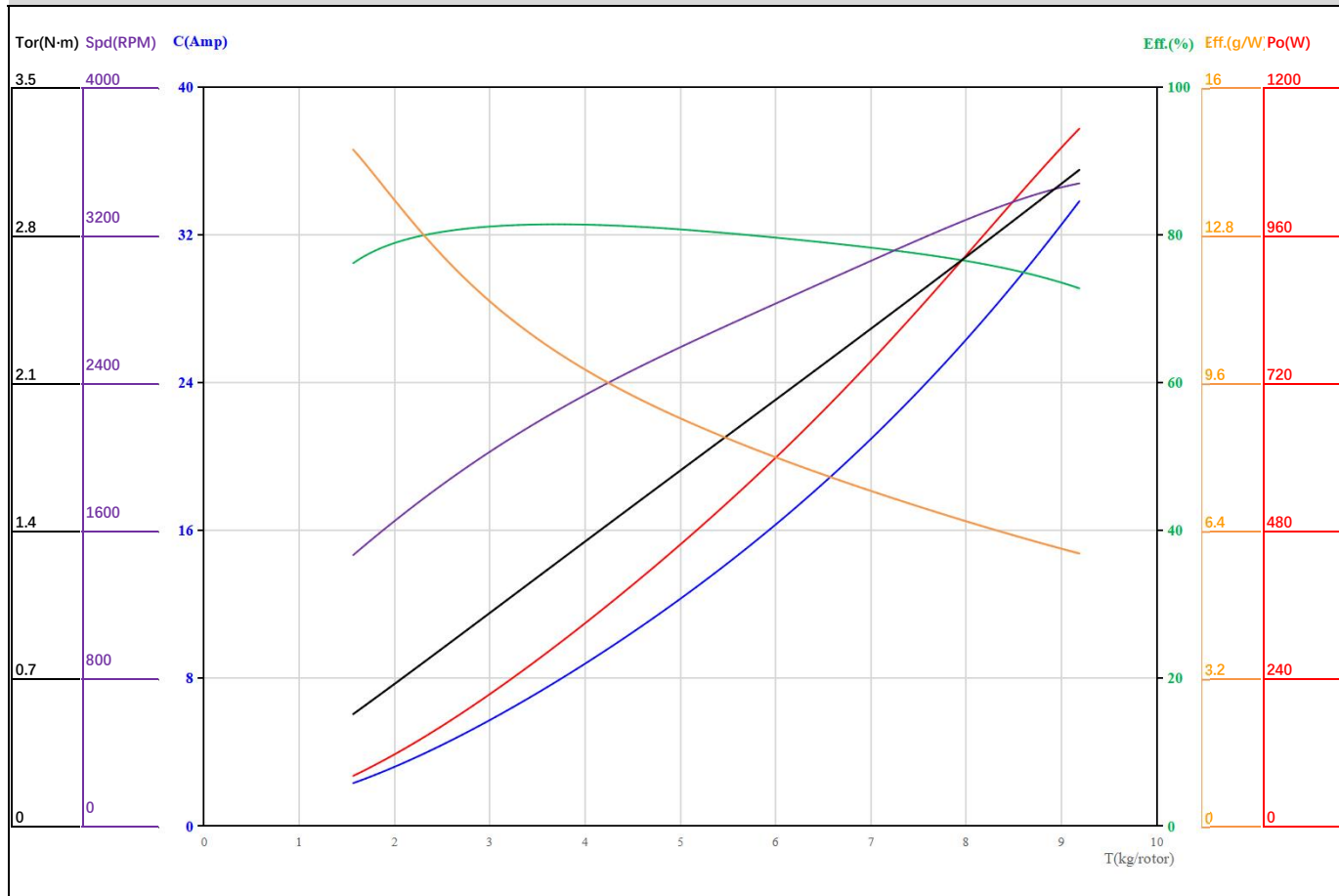
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 28x9.2	33%	1438	2.1	97.8	1508	14.7	0.46	73.3	73.2
		35%	1599	2.4	111.7	1587	14.3	0.52	85.7	
		37%	1778	2.8	128.5	1672	13.8	0.57	100.5	
		39%	1972	3.2	147.9	1760	13.3	0.64	117.3	
		42%	2281	3.9	181.4	1894	12.6	0.74	146.0	
		45%	2605	4.8	219.3	2024	11.9	0.84	178.1	
		48%	2937	5.7	260.7	2149	11.3	0.95	212.9	
		51%	3273	6.6	305.0	2268	10.7	1.05	250.0	
		54%	3613	7.6	351.9	2381	10.3	1.16	289.1	
		57%	3955	8.7	401.4	2488	9.9	1.27	330.1	
		60%	4301	9.9	454.0	2592	9.5	1.38	373.3	
		63%	4654	11.1	510.2	2692	9.1	1.49	419.1	
		66%	5014	12.4	570.7	2791	8.8	1.60	467.9	
		69%	5383	13.8	636.1	2890	8.5	1.72	520.3	
		72%	5763	15.4	707.4	2988	8.1	1.84	576.7	
		75%	6151	17.1	784.7	3087	7.8	1.97	637.3	
		78%	6547	18.9	868.1	3185	7.5	2.10	701.9	
		81%	6946	20.8	956.6	3282	7.3	2.24	769.5	
		84%	7338	22.8	1048.2	3373	7.0	2.37	838.2	
		87%	7714	24.8	1139.2	3458	6.8	2.50	904.9	
		90%	8059	26.6	1224.7	3530	6.6	2.61	965.7	
		100%	8693	30.1	1384.4	3647	6.3	2.81	1071.9	

*以上数据为好盈实验室于室温 25℃、海平面高度，变化油门输入调节测得，电机温度为65%油门运行10分钟数据，仅供参考。

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100KV+MSC 29x9.5 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

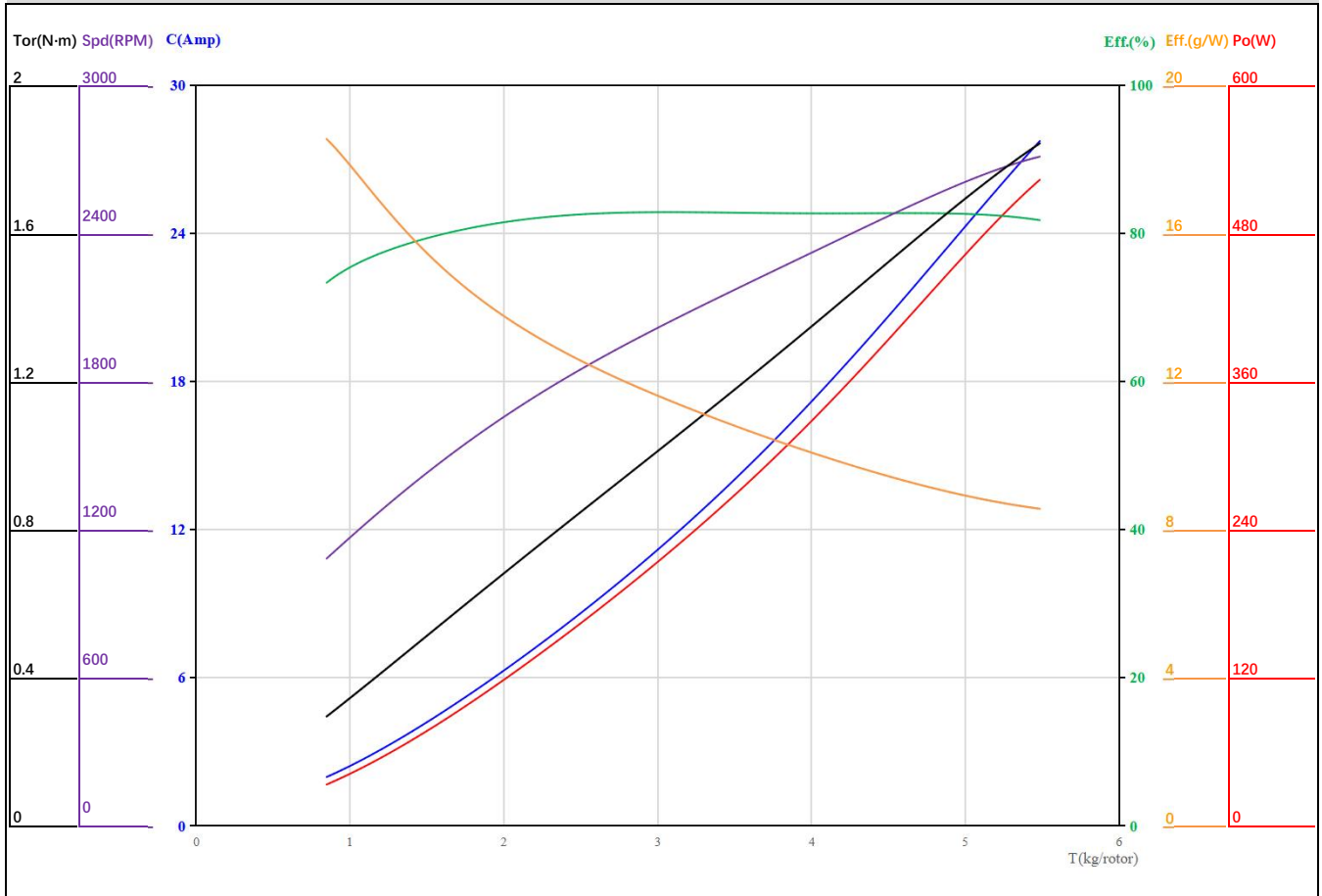
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 29x9.5	33%	1611	2.4	110.7	1486	14.5	0.54	84.8	77.4
		35%	1795	2.8	127.4	1566	14.1	0.61	99.2	
		37%	1994	3.2	146.9	1649	13.6	0.67	115.9	
		39%	2205	3.7	169.0	1734	13.0	0.74	134.6	
		42%	2537	4.5	206.6	1862	12.3	0.85	166.4	
		45%	2884	5.4	249.1	1987	11.6	0.97	201.9	
		48%	3241	6.4	295.8	2106	11.0	1.09	240.6	
		51%	3604	7.5	346.3	2219	10.4	1.21	282.1	
		54%	3972	8.7	400.3	2326	9.9	1.34	325.9	
		57%	4344	9.9	457.8	2427	9.5	1.46	372.0	
		60%	4720	11.3	518.8	2524	9.1	1.59	420.3	
		63%	5101	12.7	583.8	2617	8.7	1.72	470.9	
		66%	5487	14.2	653.1	2709	8.4	1.85	524.2	
		69%	5878	15.8	727.1	2801	8.1	1.98	580.2	
		72%	6273	17.5	806.2	2892	7.8	2.11	639.4	
		75%	6670	19.4	890.6	2984	7.5	2.24	701.5	
		78%	7068	21.3	980.1	3076	7.2	2.38	766.3	
		81%	7461	23.3	1073.9	3165	6.9	2.51	832.8	
		84%	7842	25.4	1170.4	3249	6.7	2.64	899.3	
		87%	8204	27.5	1267.1	3324	6.5	2.77	963.3	
		90%	8533	29.6	1359.8	3387	6.3	2.88	1021.8	
		100%	9187	33.8	1556.3	3480	5.9	3.11	1132.8	

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150KV+MSC 28x9.2 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

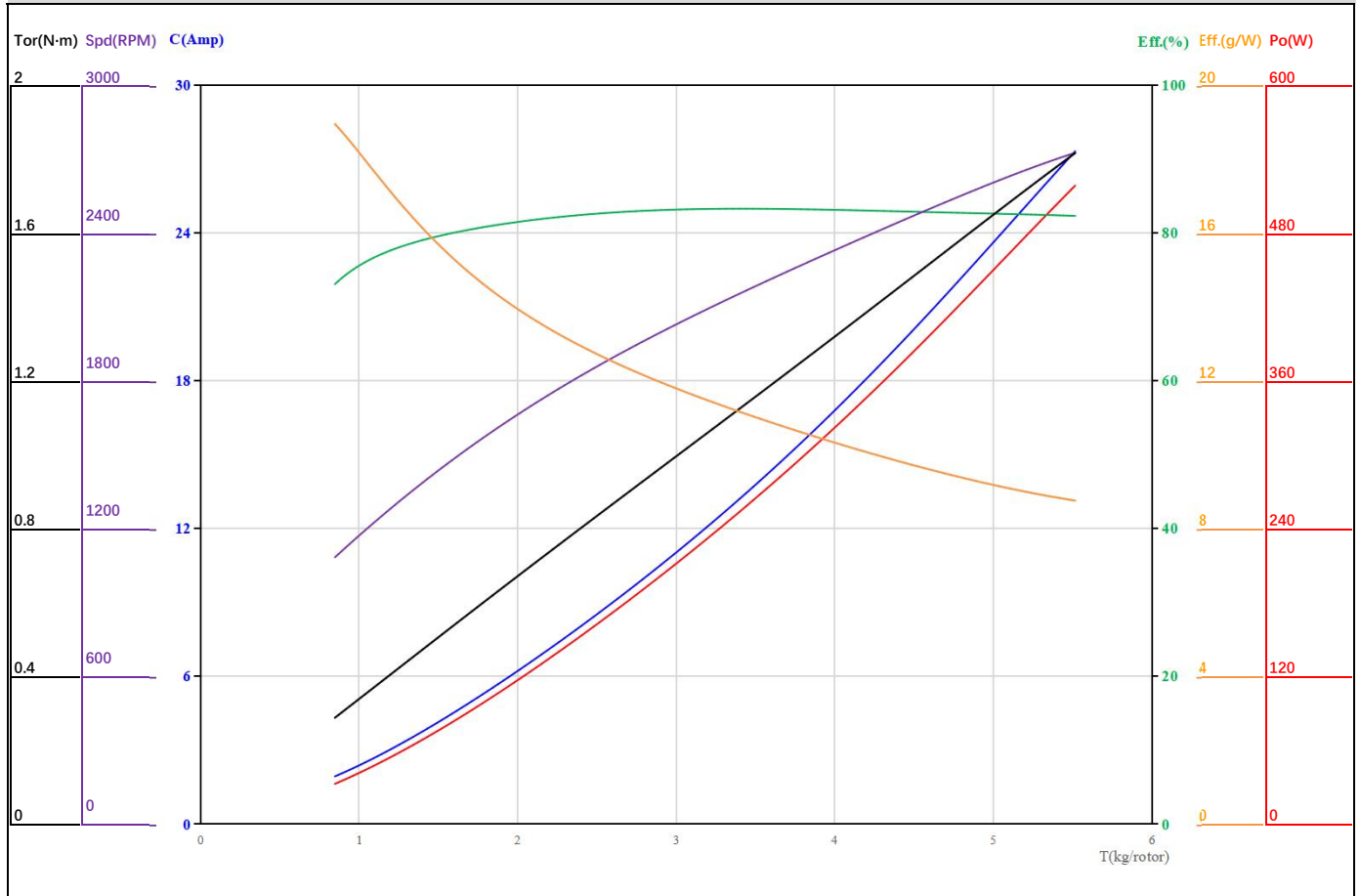
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N·m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
23V (6S LiPo)	MSC 28x9.2	33%	871	2.0	47.2	1096	18.5	0.30	34.8	54.2
		35%	968	2.3	53.7	1151	18.0	0.33	40.3	
		37%	1070	2.7	61.2	1207	17.5	0.37	46.6	
		39%	1178	3.0	69.5	1266	16.9	0.40	53.6	
		42%	1349	3.6	83.6	1355	16.1	0.46	65.6	
		45%	1529	4.3	99.6	1445	15.4	0.52	79.2	
		48%	1720	5.1	117.4	1535	14.6	0.59	94.5	
		51%	1919	5.9	137.0	1623	14.0	0.66	111.3	
		54%	2127	6.9	158.4	1709	13.4	0.72	129.7	
		57%	2344	7.9	181.6	1793	12.9	0.80	149.6	
		60%	2569	9.0	206.7	1875	12.4	0.87	170.9	
		63%	2802	10.1	234.0	1954	12.0	0.95	193.8	
		66%	3043	11.4	263.5	2032	11.5	1.03	218.4	
		69%	3290	12.8	295.3	2109	11.1	1.11	244.7	
		72%	3542	14.3	329.6	2185	10.7	1.19	273.0	
		75%	3798	15.9	366.3	2262	10.4	1.28	303.1	
		78%	4054	17.6	404.9	2339	10.0	1.37	335.0	
		81%	4307	19.3	445.0	2414	9.7	1.46	368.2	
		84%	4554	21.0	485.3	2487	9.4	1.54	401.7	
		87%	4789	22.8	524.7	2554	9.1	1.62	434.2	
		90%	5005	24.3	561.3	2611	8.9	1.70	464.0	
		100%	5483	27.8	640.0	2712	8.6	1.84	523.6	

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150KV+MSC 29x9.5 负载性能参数 Load performance parameters

曲线图 Graph



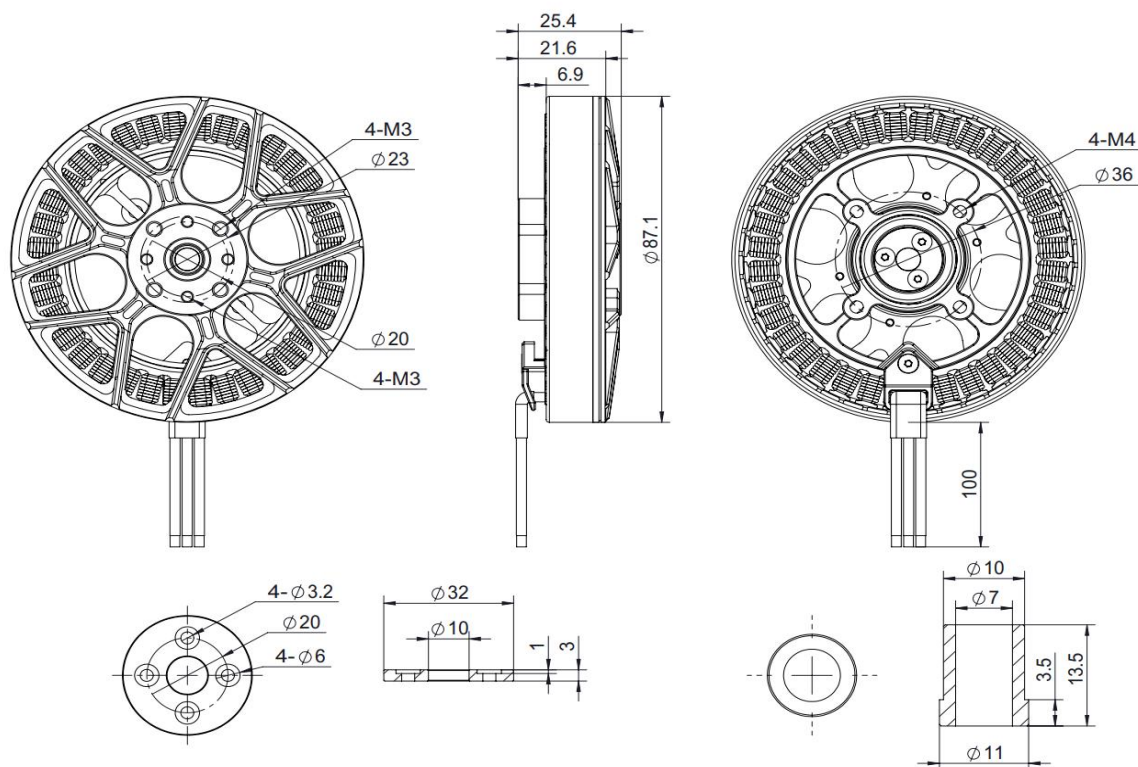
拉力数据表 Motor Propeller Pull Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
23V (6S LiPo)	MSC 29x9.5	33%	869	2.0	46.1	1096	18.9	0.30	33.9	53.6
		35%	963	2.3	52.4	1151	18.4	0.33	39.3	
		37%	1064	2.6	59.6	1208	17.8	0.36	45.5	
		39%	1171	2.9	67.8	1266	17.3	0.40	52.5	
		42%	1341	3.5	81.7	1356	16.4	0.45	64.3	
		45%	1522	4.2	97.6	1447	15.6	0.51	77.8	
		48%	1712	5.0	115.2	1537	14.9	0.58	92.7	
		51%	1911	5.8	134.4	1625	14.2	0.64	109.2	
		54%	2117	6.7	155.4	1711	13.6	0.71	127.2	
		57%	2332	7.7	178.1	1796	13.1	0.78	146.6	
		60%	2555	8.8	202.5	1878	12.6	0.85	167.5	
		63%	2786	9.9	228.9	1958	12.2	0.93	190.0	
		66%	3026	11.2	257.4	2037	11.8	1.00	214.2	
		69%	3273	12.5	288.2	2115	11.4	1.08	240.1	
		72%	3528	13.9	321.4	2193	11.0	1.17	267.7	
		75%	3788	15.5	356.9	2269	10.6	1.25	297.1	
		78%	4050	17.1	394.7	2345	10.3	1.34	328.1	
		81%	4312	18.8	434.1	2419	9.9	1.42	360.3	
		84%	4569	20.6	474.2	2490	9.6	1.51	393.0	
		87%	4814	22.3	513.8	2556	9.4	1.59	425.1	
		90%	5040	23.9	551.1	2615	9.1	1.66	455.3	
		100%	5517	27.3	629.8	2726	8.8	1.82	518.6	

*以上数据为好盈实验室于室温 25℃、海平面高度，变化油门输入调节测得，电机温度为65%油门运行10分钟数据，仅供参考。

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尺寸图 Dimension figure



应用搭配推荐 Recommended application combinations

旋翼电机 Motor	M8108 Light-85/100/150KV
旋翼桨叶 Propeller	MSC 28x9.2/MSC 29x9.5/MSC 30x9.8
搭配电调 ESC	XRotor Pro H60A 14S
电池电压 Battery	12S LiPo/6S LiPo
单轴应用拉力区间 Takeoff weight / rotor	2.5~3.5kg
四轴最大起飞重量 Takeoff weight of quadrotor	10~14kg