

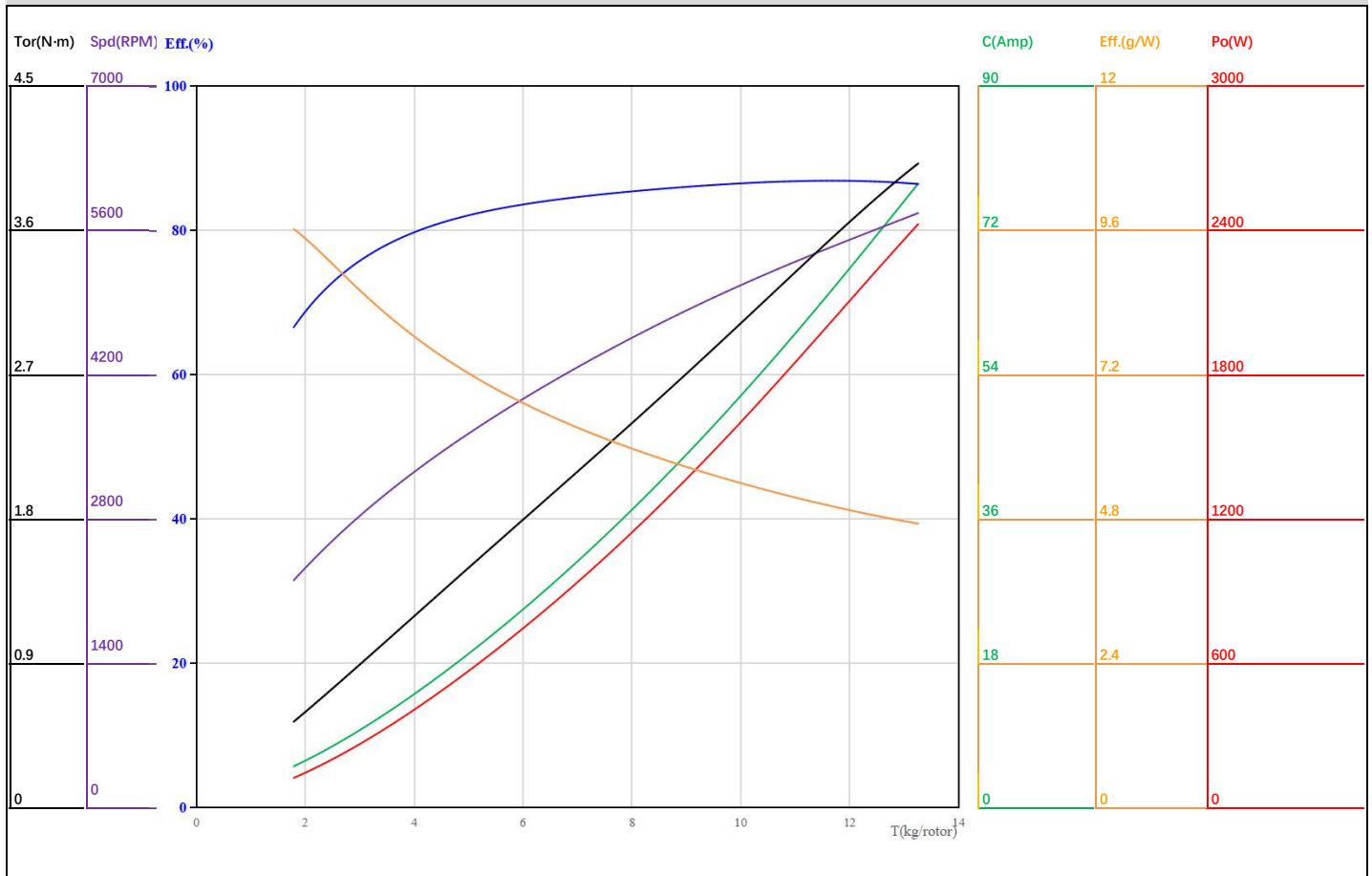
C7225 Motor Specification

Specification			
Model	C7225-160KV	Protection level	IPX5
Motor Size	Φ80.9*H62 mm	Slot& Pole	24N22P
Stator Size	Φ72*H25 mm	Dynamic balance	≤15 mg
Stator process	High standard silicon steel sheet, rust proof, 180 °C high temperature resistance paint-coat	Bearing	Water proof bearing
Enamelled wire	220 °C	Motor axle diameter	Φ10 mm
Magnet	180 °C	Props mounting dimensions	4xM3@D20 mm, 4xM4@D23 mm
Isolation test	500V AC high voltage resistance test	Motor mounting dimensions	4xM4@D36 mm
Rated power input	1030 W	Rated power output	850 W

Specification	
KV	160 KV
Battery (LiPo)	LiPo-12S (48V)
No-load current	4.36 A
Maximum current (Non-hermetic Ambient Temperature ≤ 25°C)	132.7 A
Max power	6377 W
Max thrust	21.7 kg
Resistance	18.4 mΩ
Wire Size	enameled wire direct lead-out
Three-phase wires length	100 mm
Weight (With cable)	755 g

160KV+24x12 Load performance parameters

Graph



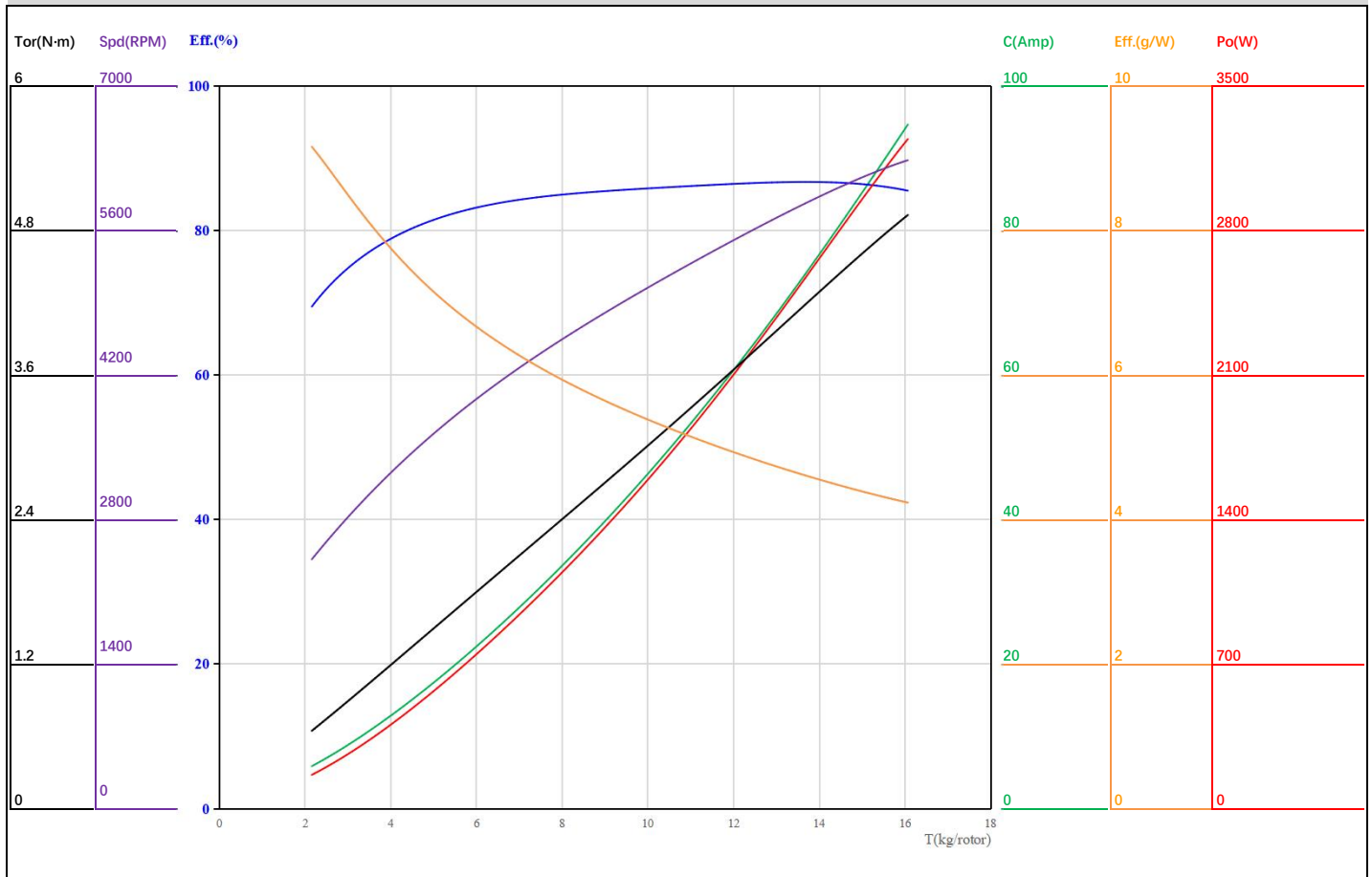
Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power(W)	Speed(RPM)	Efficiency(g/W)	Torque(N·m)	Power Output(W)	Temperature(°C)
36V (10S LiPo)	24x12	33%	1834	5.3	191.2	2230	9.6	0.55	128.2	51°C
		35%	2028	6.0	214.7	2340	9.4	0.60	148.1	
		37%	2248	6.7	242.7	2458	9.3	0.67	172.0	
		39%	2488	7.6	274.9	2582	9.1	0.74	199.8	
		42%	2876	9.2	330.2	2771	8.7	0.85	248.0	
		45%	3288	10.9	392.9	2958	8.4	0.98	303.0	
		48%	3716	12.8	462.3	3140	8.0	1.11	364.2	
		51%	4158	14.9	537.9	3317	7.7	1.24	431.2	
		54%	4614	17.2	620.0	3490	7.4	1.38	504.0	
		57%	5087	19.7	709.0	3659	7.2	1.52	583.0	
		60%	5580	22.3	806.0	3827	6.9	1.67	669.1	
		63%	6098	25.3	912.3	3995	6.7	1.82	763.5	
		66%	6646	28.5	1029.4	4165	6.5	1.99	867.5	
		69%	7226	32.1	1158.8	4338	6.2	2.16	982.6	
		72%	7840	36.1	1301.7	4513	6.0	2.35	1109.9	
		75%	8487	40.4	1458.9	4689	5.8	2.55	1250.4	
		78%	9163	45.2	1630.4	4863	5.6	2.76	1403.7	
		81%	9858	50.3	1814.5	5034	5.4	2.98	1568.4	
		84%	10559	55.7	2007.8	5197	5.3	3.20	1740.5	
87%	11246	61.1	2204.0	5349	5.1	3.42	1913.9			
90%	11892	66.4	2394.1	5486	5.0	3.62	2079.4			
100%	13255	77.8	2806.7	5767	4.7	4.02	2425.1			

*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.

160KV+24x12 Load performance parameters

Graph



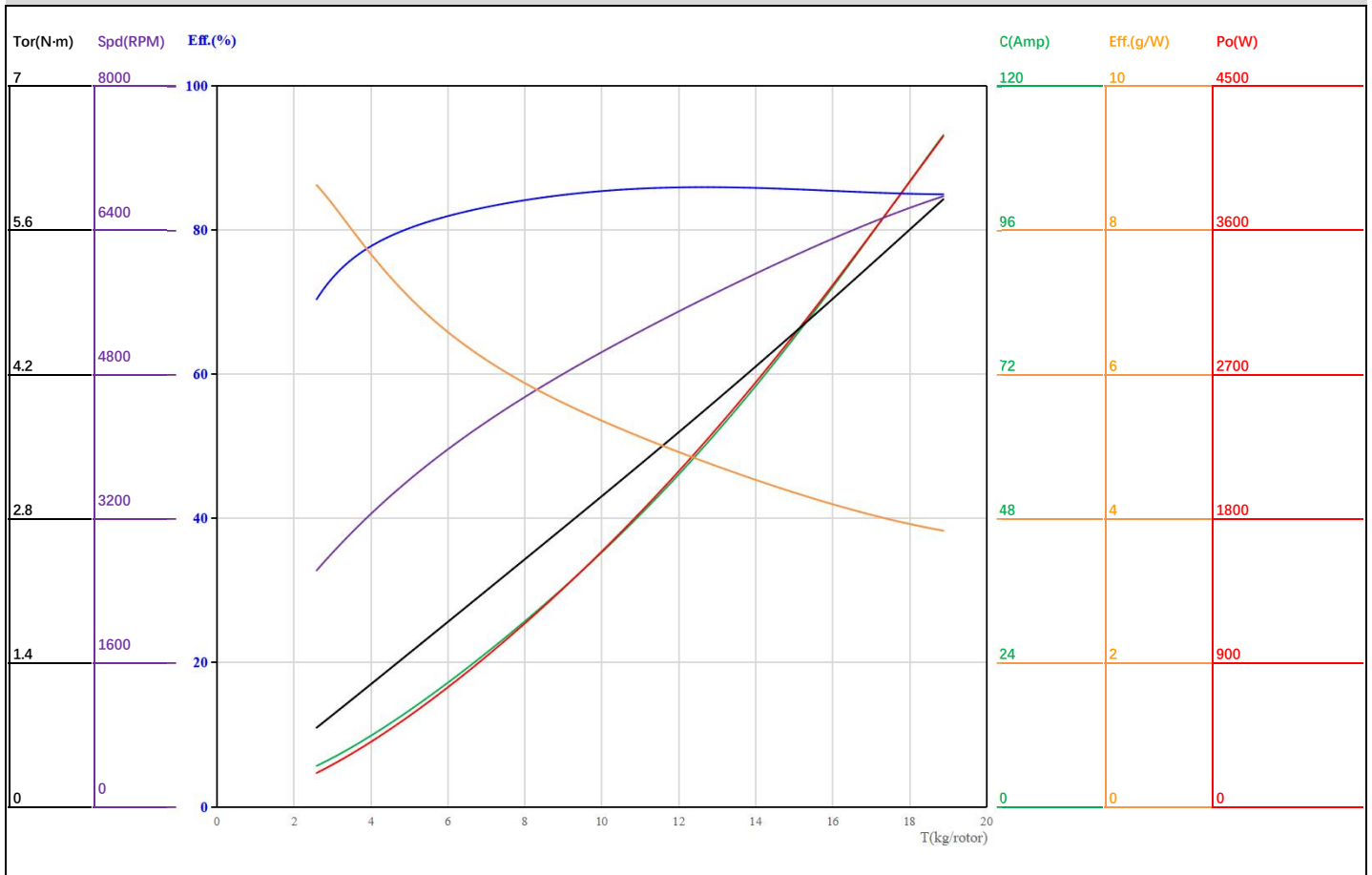
Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power(W)	Speed(RPM)	Efficiency(g/W)	Torque(N·m)	Power Output(W)	Temperature(°C)
40V (10S LiPo)	24x12	33%	2218	6.1	243.3	2448	9.1	0.66	170.2	54°C
		35%	2475	6.9	277.5	2576	8.9	0.74	199.3	
		37%	2747	7.9	315.8	2707	8.7	0.82	232.0	
		39%	3032	8.9	358.0	2840	8.5	0.90	268.4	
		42%	3482	10.7	428.7	3039	8.1	1.04	330.1	
		45%	3958	12.7	508.4	3238	7.8	1.18	400.4	
		48%	4459	14.9	597.5	3435	7.5	1.33	479.4	
		51%	4987	17.4	696.5	3629	7.2	1.49	567.5	
		54%	5544	20.1	806.0	3822	6.9	1.66	665.1	
		57%	6131	23.1	927.0	4012	6.6	1.84	772.9	
		60%	6751	26.5	1060.6	4200	6.4	2.03	891.6	
		63%	7405	30.2	1207.7	4387	6.1	2.22	1021.9	
		66%	8093	34.2	1369.6	4573	5.9	2.43	1164.9	
		69%	8814	38.6	1547.3	4759	5.7	2.65	1321.4	
		72%	9568	43.5	1741.3	4945	5.5	2.88	1492.4	
		75%	10347	48.7	1951.8	5131	5.3	3.12	1678.1	
		78%	11146	54.4	2178.1	5316	5.1	3.37	1878.3	
		81%	11955	60.4	2418.0	5498	4.9	3.63	2090.9	
		84%	12759	66.6	2667.7	5674	4.8	3.89	2311.7	
87%	13542	72.9	2920.8	5839	4.6	4.14	2533.8			
90%	14282	79.1	3168.5	5985	4.5	4.38	2747.0			
100%	16066	94.7	3792.7	6284	4.2	4.93	3244.3			

*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.

160KV+24x12 Load performance parameters

Graph



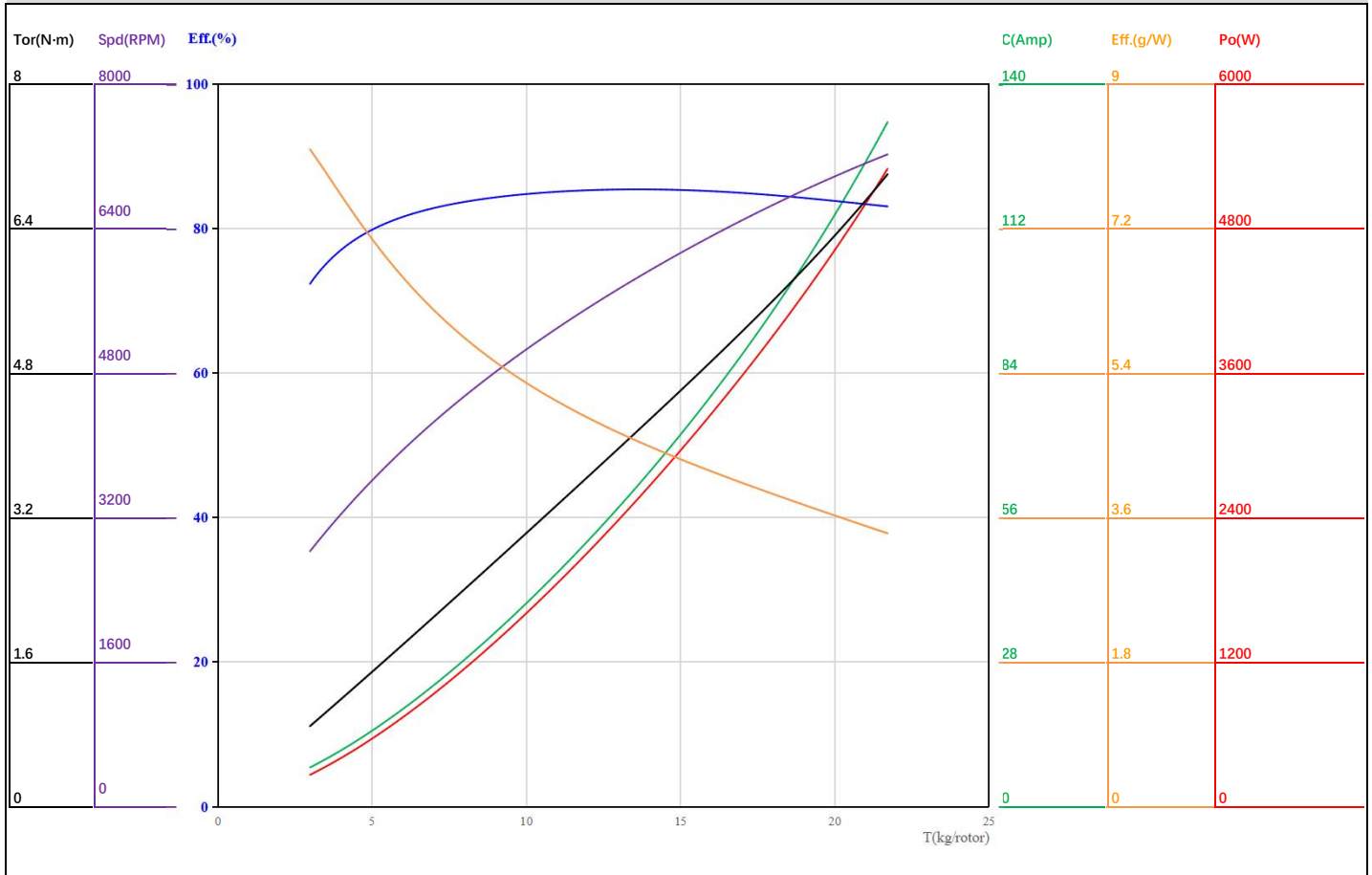
Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power(W)	Speed(RPM)	Efficiency(g/W)	Torque(N·m)	Power Output(W)	Temperature(°C)
44V (12S LiPo)	24x12	33%	2655	7.0	309.2	2657	8.6	0.79	219.5	80°C 2min16S
		35%	2949	8.0	351.3	2797	8.4	0.88	256.7	
		37%	3265	9.1	399.4	2941	8.2	0.97	299.0	
		39%	3599	10.3	453.4	3087	7.9	1.07	346.2	
		42%	4133	12.4	545.3	3306	7.6	1.23	426.4	
		45%	4702	14.8	650.1	3524	7.2	1.40	517.8	
		48%	5303	17.4	767.6	3738	6.9	1.59	620.6	
		51%	5938	20.4	897.9	3949	6.6	1.78	735.2	
		54%	6606	23.6	1041.7	4156	6.3	1.98	862.0	
		57%	7309	27.2	1199.5	4360	6.1	2.19	1002.0	
		60%	8049	31.2	1372.8	4562	5.9	2.42	1156.0	
		63%	8826	35.5	1562.8	4763	5.6	2.66	1325.1	
		66%	9641	40.2	1771.6	4963	5.4	2.91	1510.5	
		69%	10492	45.4	2000.8	5162	5.2	3.17	1713.1	
		72%	11377	51.1	2252.3	5362	5.1	3.44	1933.7	
		75%	12289	57.4	2526.9	5561	4.9	3.73	2172.2	
		78%	13220	64.1	2824.4	5758	4.7	4.03	2427.6	
		81%	14159	71.3	3141.9	5951	4.5	4.33	2697.2	
84%	15091	78.9	3473.6	6134	4.3	4.63	2975.8			
87%	15994	86.5	3809.6	6305	4.2	4.93	3255.9			
90%	16845	93.9	4136.1	6457	4.1	5.22	3526.9			
100%	18874	111.8	4927.0	6776	3.8	5.90	4186.9			

*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 at 65% throttle, for reference only.

160KV+24x12 Load performance parameters

Graph

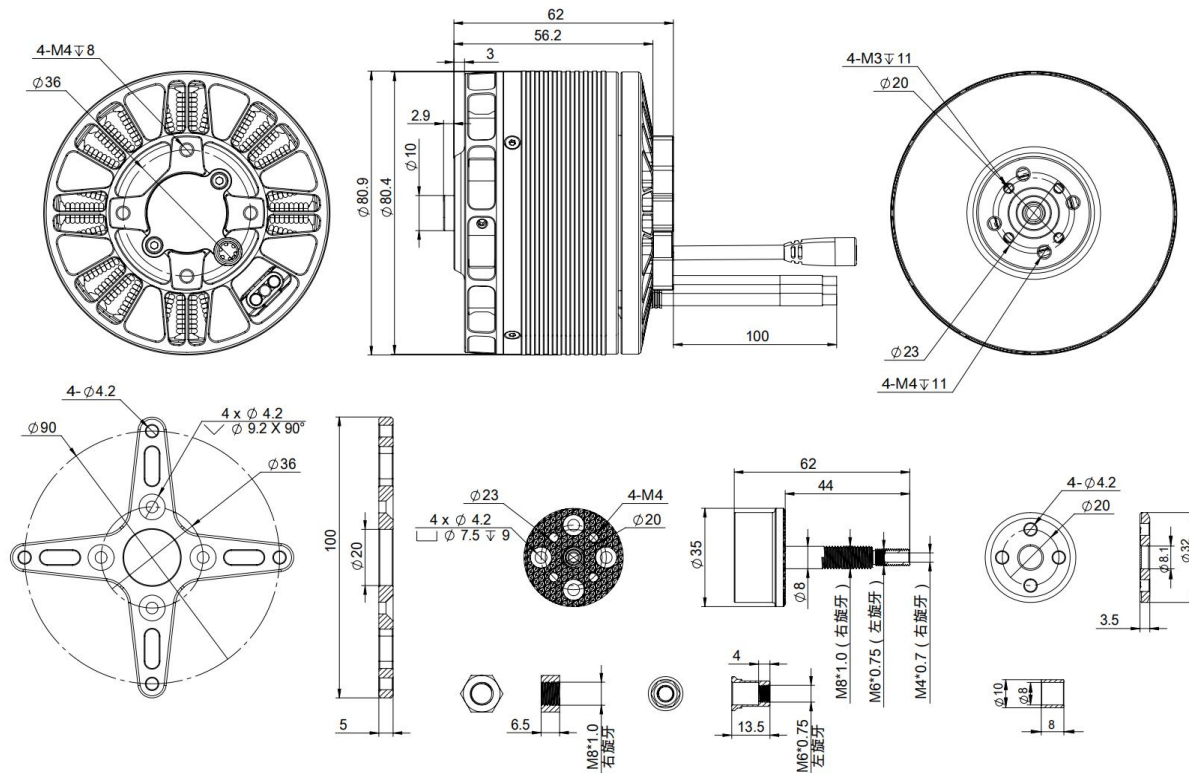


Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power(W)	Speed(RPM)	Efficiency(g/W)	Torque(N·m)	Power Output(W)	Temperature(°C)
48V (12S LiPo)	24x12	33%	3068	7.8	376.6	2863	8.1	0.92	274.4	80°C 1min
		35%	3416	8.9	429.6	3009	8.0	1.02	320.9	
		37%	3801	10.2	491.7	3165	7.7	1.13	375.5	
		39%	4215	11.7	562.5	3325	7.5	1.26	437.7	
		42%	4877	14.2	683.6	3569	7.1	1.46	544.1	
		45%	5575	17.1	821.1	3811	6.8	1.67	665.0	
		48%	6298	20.3	973.8	4046	6.5	1.89	799.2	
		51%	7043	23.7	1141.2	4273	6.2	2.11	946.2	
		54%	7811	27.5	1323.5	4494	5.9	2.35	1106.3	
		57%	8605	31.7	1521.9	4710	5.7	2.60	1280.3	
		60%	9429	36.2	1738.2	4923	5.4	2.85	1469.9	
		63%	10290	41.1	1974.8	5134	5.2	3.12	1676.9	
		66%	11193	46.5	2234.7	5344	5.0	3.40	1903.5	
		69%	12143	52.5	2520.7	5554	4.8	3.70	2151.6	
		72%	13140	59.0	2835.4	5764	4.6	4.01	2422.9	
		75%	14181	66.2	3181.0	5974	4.5	4.34	2718.1	
		78%	15260	74.0	3558.4	6181	4.3	4.69	3036.7	
		81%	16362	82.5	3966.4	6383	4.1	5.05	3376.6	
		84%	17466	91.6	4400.7	6575	4.0	5.42	3732.9	
		87%	18543	101.0	4852.1	6754	3.8	5.79	4097.6	
90%	19553	110.4	5303.8	6913	3.7	6.16	4457.6			
100%	21713	132.7	6376.3	7224	3.4	7.00	5298.6			

*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 at 65% throttle, for reference only.

Dimension figure



Recommended application combinations

Motor	C7225-160KV
Propeller	24x12
ESC	XRotor Pro H130A 14S BLDC IPC XRotor Pro H200A 14S BLDC IPC
Battery	12S LiPo
Takeoff weight of Single motor	30~35kg