

Specification

Motor Size	$\Phi 55.6 \times 38.9 \text{mm}$	Copper Wire	220°C high temperature resistance: Level C
Stator	Imported silicon steel sheet; Anti-rust treatment; 150°C high temperature-resisting coatings	Coil Insulation Test	500V
Configuration	24N28P	Centrifugal Cooling Design	YES
Shaft Diameter	IN : 6mm , OUT : 4mm	Rotor Dynamic Balance Standard	$\leq 5 \text{Mg}$
Bearing	Imported 696ZZ	Motor Dynamic Balance Standard	$\leq 10 \text{Mg}$
Magnet Level	180°C high temperature resistance	IP	IP45
Lead Cable	16AWG*150mm		
KV	320	Rated Voltage ( Lipo )	6S
Idle Current ( 18V )	1.8A	ESC Recommendation	FLAME 60A 12S
Peak Current ( 180s )	55A	Propeller Recommendation	20-22"
Max.Power ( 180s )	1300W	Motor Weight (incl. Cable)	225g
Internal Resistance	38m $\Omega$	Package Weight	400g
KV	380	Rated Voltage ( Lipo )	6S
Idle Current ( 15V )	2.0A	ESC Recommendation	FLAME 60A 12S

Peak Current ( 180s )	50A	Propeller Recommendation	17-18"
Max.Power ( 180s )	1200W	Motor Weight (incl. Cable)	225g
Internal Resistance	28mΩ	Package Weight	400g

Test Data

Type	Propeller	Throttle	Voltage (V)	Thrust (g)	Torque (N*m)	Current (A)	RPM	Power (W)	Efficiency (g/W)	Operating Temperature (°C)
MN505S KV320	LIGPOWER P20*6	40%	24.08	1068	0.16	4.10	2729	99	10.83	65.3 (Ambient Temperature: 9.5°C)
		42%	24.07	1151	0.17	4.50	2828	109	10.59	
		44%	24.08	1264	0.20	5.10	2947	122	10.36	
		46%	24.07	1357	0.22	5.60	3069	135	10.03	
		48%	24.07	1454	0.24	6.10	3189	148	9.83	
		50%	24.07	1543	0.26	6.80	3286	164	9.42	
		52%	24.06	1666	0.29	7.50	3410	181	9.19	
		54%	24.06	1804	0.32	8.40	3559	201	8.97	
		56%	24.05	1975	0.35	9.30	3705	224	8.82	
		58%	24.06	2082	0.38	10.10	3818	242	8.60	
		60%	24.05	2178	0.41	11.00	3938	264	8.24	
		62%	24.05	2311	0.44	12.00	4050	289	8.00	
		64%	24.05	2486	0.47	13.00	4151	313	7.96	
		66%	24.04	2659	0.51	14.20	4308	342	7.77	
		68%	24.04	2765	0.53	15.30	4407	367	7.53	
		70%	24.03	2921	0.57	16.30	4611	393	7.44	
		75%	24.02	3376	0.65	19.40	4973	466	7.25	
		80%	24.01	3767	0.73	22.70	5230	544	6.92	
90%	23.99	4514	0.91	29.70	5698	713	6.33			
100%	23.96	5372	1.10	38.50	6276	921	5.83			
MN505S KV320	LIGPOWER P22*6.6	40%	24.01	1424	0.27	5.50	2573	132	10.83	88.5 (Ambient Temperature: 9.5°C)
		42%	24.02	1525	0.29	6.10	2668	145	10.49	
		44%	24.01	1657	0.33	6.70	2770	162	10.24	
		46%	24.01	1788	0.36	7.50	2873	180	9.95	
		48%	24.01	1959	0.39	8.30	2990	200	9.79	
		50%	24.00	2090	0.43	9.20	3197	221	9.46	
		52%	24.00	2267	0.46	10.30	3312	246	9.20	
		54%	24.00	2413	0.51	11.40	3439	272	8.86	
		56%	24.00	2586	0.55	12.60	3565	301	8.59	
		58%	23.99	2799	0.60	14.00	3689	335	8.36	
		60%	23.99	2968	0.64	15.20	3790	364	8.15	
		62%	23.99	3149	0.69	16.60	3888	398	7.90	
		64%	23.98	3298	0.73	17.90	3980	429	7.69	

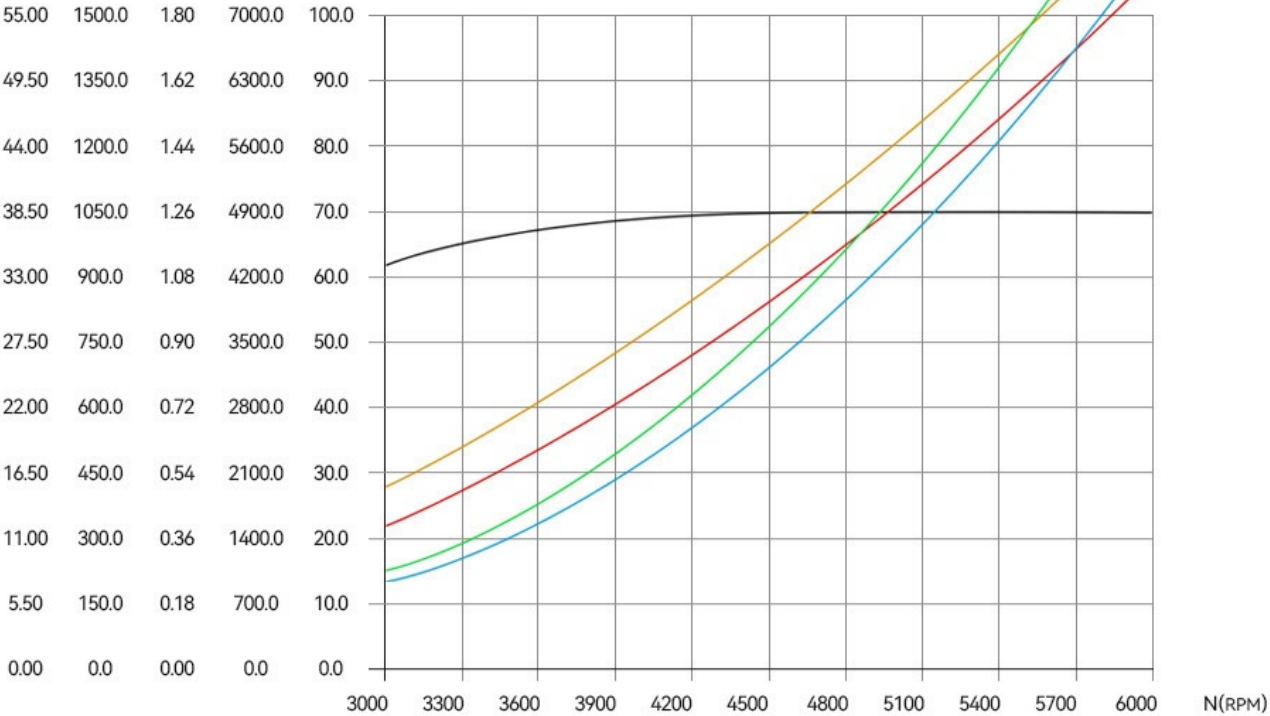
		66%	23.97	3477	0.77	19.30	4071	464	7.50	
		68%	23.97	3665	0.81	20.90	4182	500	7.33	
		70%	23.96	3843	0.85	22.20	4375	533	7.21	
		75%	23.95	4349	0.96	26.70	4623	640	6.80	
		80%	23.94	4828	1.08	31.00	4936	743	6.50	
		90%	23.90	5747	1.31	41.10	5346	983	5.85	
		100%	23.87	6680	1.54	52.40	5625	1249	5.35	
MN505S KV380	LIGPOWER P17*5.8	40%	24.02	903	0.40	4.60	3287	110	8.20	66.5  (Ambient Temperature: 9.5°C)
		42%	24.01	987	0.42	5.10	3461	123	8.02	
		44%	24.01	1076	0.44	5.70	3631	137	7.84	
		46%	24.01	1153	0.46	6.30	3770	151	7.64	
		48%	24.01	1245	0.48	6.90	3916	165	7.55	
		50%	24.00	1386	0.44	7.70	4096	186	7.47	
		52%	24.00	1504	0.48	8.60	4255	206	7.31	
		54%	24.00	1628	0.48	9.40	4417	225	7.24	
		56%	24.00	1745	0.50	10.20	4557	245	7.11	
		58%	23.99	1877	0.52	11.20	4715	268	6.99	
		60%	23.99	1975	0.55	12.00	4844	287	6.87	
		62%	23.98	2122	0.57	13.10	4983	313	6.78	
		64%	23.98	2224	0.58	14.10	5136	337	6.60	
		66%	23.98	2344	0.61	15.20	5272	364	6.44	
		68%	23.97	2481	0.63	16.40	5404	392	6.33	
		70%	23.97	2590	0.65	17.40	5527	416	6.22	
		75%	23.96	2916	0.71	20.20	5830	484	6.02	
		80%	23.95	3176	0.76	23.40	6134	561	5.67	
		90%	23.92	3860	0.88	31.00	6726	740	5.21	
100%	23.89	4550	1.01	39.80	7324	950	4.79			
MN505S KV380	LIGPOWER P18*6.1	40%	24.02	1071	0.05	5.30	3196	127	8.43	83.5  (Ambient Temperature: 9.5°C)
		42%	24.02	1160	0.08	5.90	3335	141	8.22	
		44%	24.01	1287	0.10	6.60	3501	158	8.16	
		46%	24.00	1414	0.12	7.40	3652	177	7.98	
		48%	24.01	1545	0.15	8.20	3813	196	7.89	
		50%	24.00	1676	0.18	9.00	3961	216	7.78	
		52%	24.00	1843	0.21	10.10	4118	242	7.63	
		54%	24.00	1985	0.24	11.20	4303	270	7.36	
		56%	23.99	2084	0.27	12.20	4430	293	7.10	
		58%	23.98	2216	0.30	13.30	4568	320	6.93	
		60%	23.98	2347	0.33	14.50	4707	348	6.75	
		62%	23.98	2486	0.36	15.60	4831	375	6.63	

64%	23.97	2645	0.38	16.90	4954	406	6.52
66%	23.97	2806	0.42	18.30	5073	439	6.40
68%	23.96	2936	0.45	19.60	5207	471	6.24
70%	23.96	3091	0.48	21.00	5330	504	6.13
75%	23.94	3456	0.56	24.50	5595	587	5.89
80%	23.93	3818	0.66	28.60	5884	685	5.58
90%	23.90	4606	0.82	37.70	6439	901	5.11
100%	23.86	5444	1.02	48.80	6975	1163	4.68

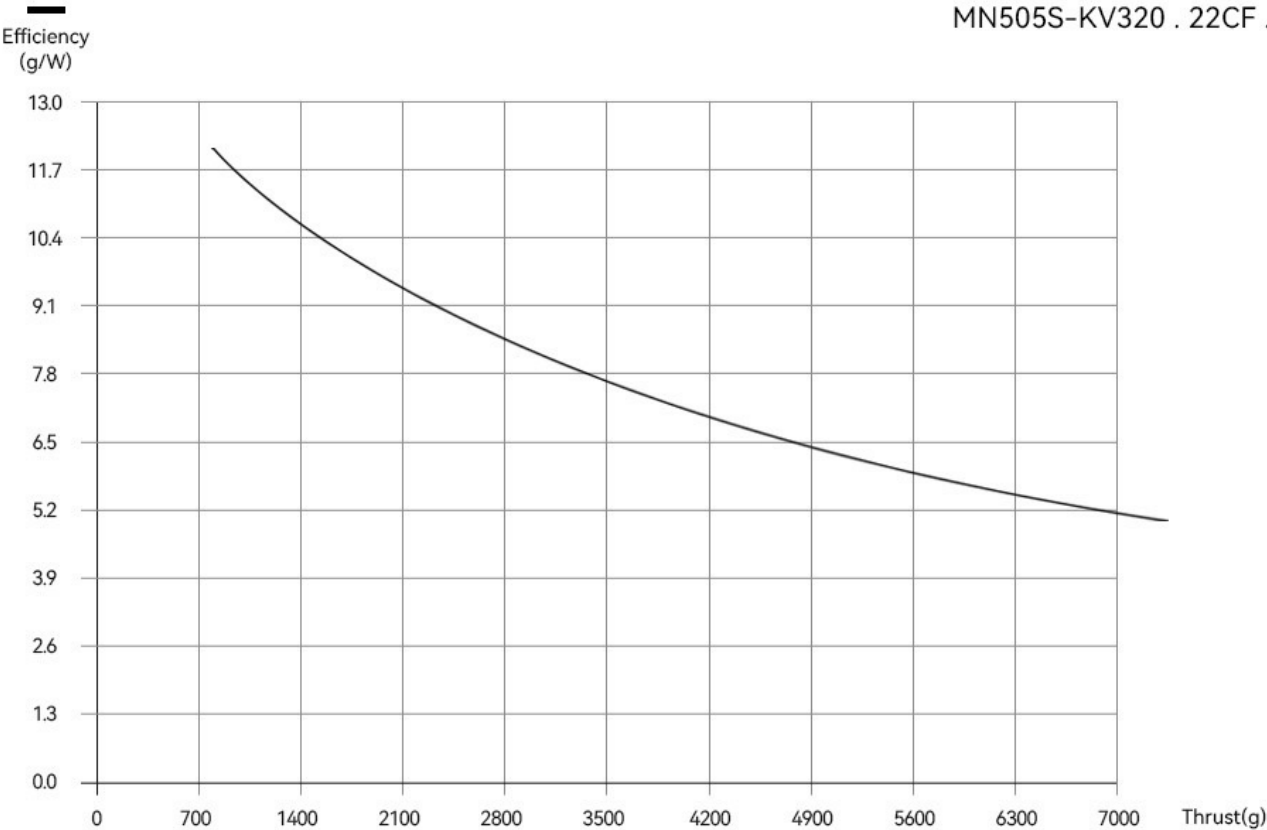
Note: Motor temperature is motor surface temperature at 100% throttle running 10mins.  
(Date above based on benchtest are for reference only,comparion with that of other motor types is not recommended.)

Analysis Chart

I(A) P1(W) T(N\*m) F(g) Eff(%)

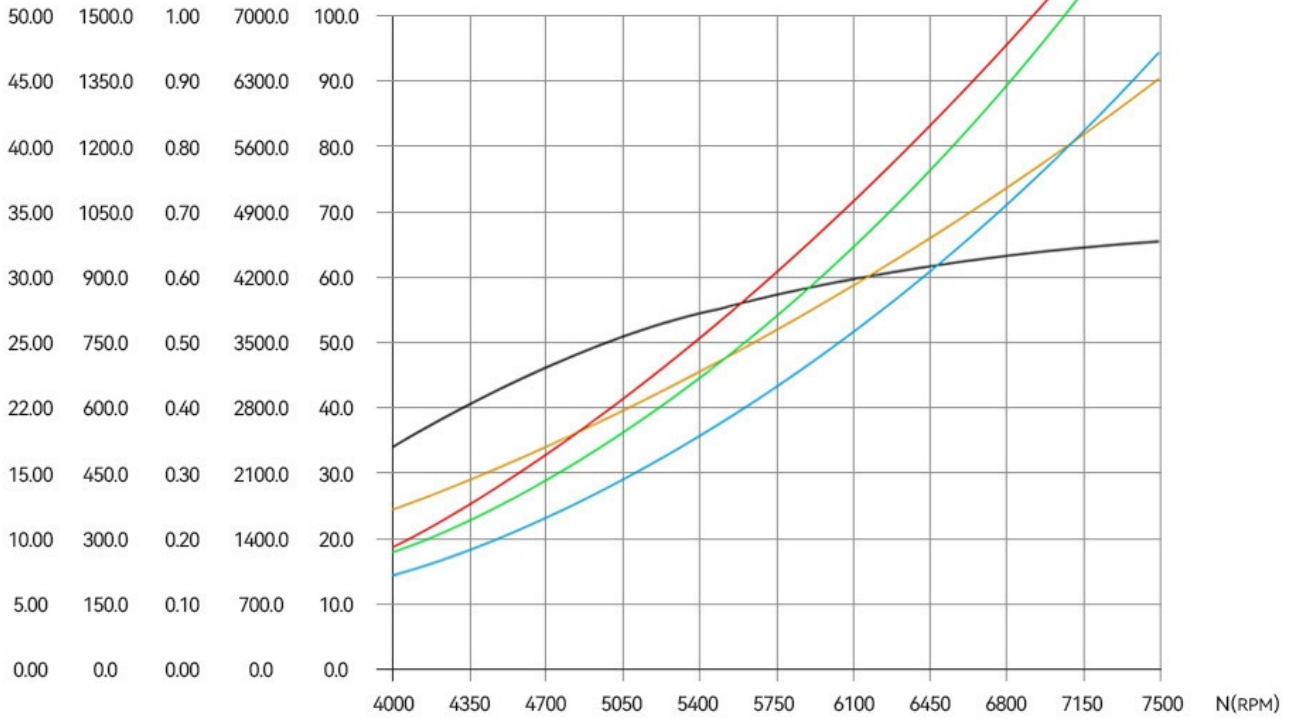


Thrust, Efficiency, Torque, Power, Current & RPM Graph



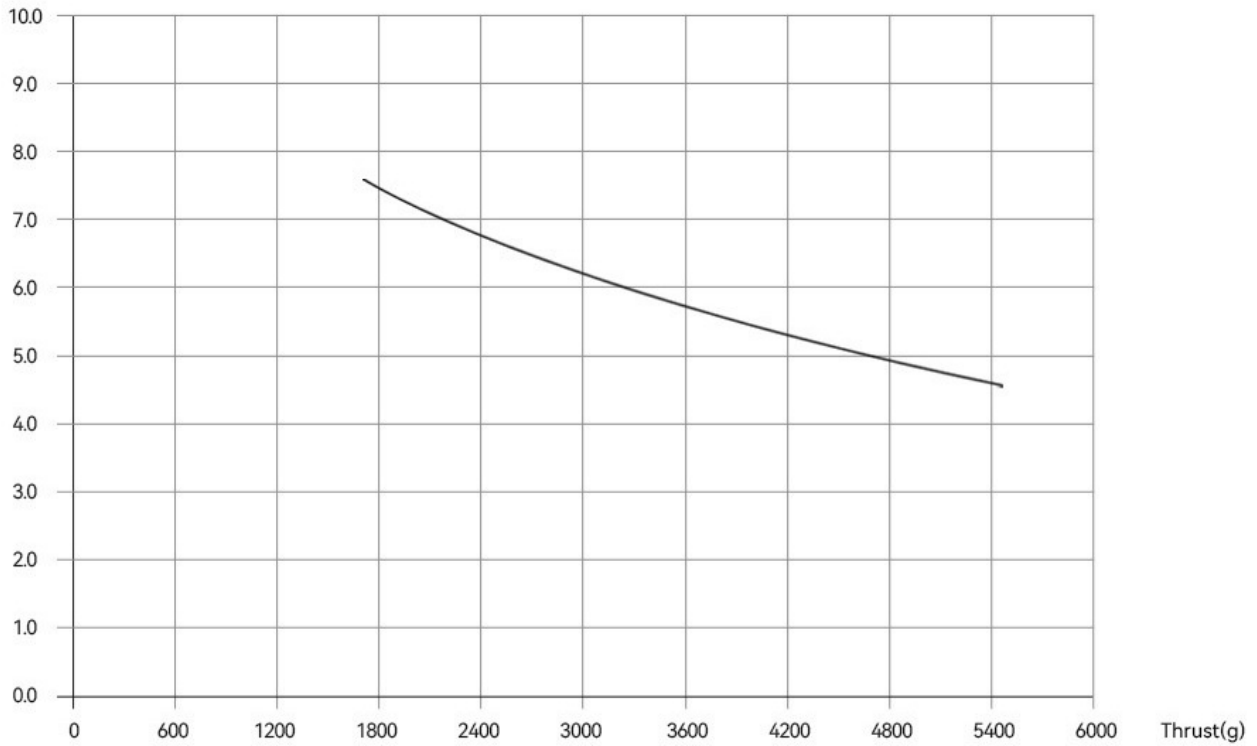
Efficiency Graph

I(A) P1(W) T(N\*m) F(g) Eff(%)



Thrust, Efficiency, Torque, Power, Current & RPM Graph

Efficiency (g/W)



Efficiency Graph

Packing List

Before using this product, please check if all the items listed above are included in the packaging. If there are any missing items, please contact our online customer service or leave message to "[onsales@ligpower.com](mailto:onsales@ligpower.com)" in time.