

Anticorrosive M6C18 IPE V3 Brushless DC Motor

Basic Information

• Place of Origin: Guangdong, China

• Brand Name: GS

Model Number: M6C18 IPE V3 170KV 330KV

Price: Negotiable



Product Specification

Motor Model: M6C18 IPE V3Motor Size: D:72 X 41.4 Mm

• Propeller Mounting Holes: D:12 M3x4, 18 M3x4, 22 M3x4

• Bearing: 696ZZ*2

Cable Length:
 150 Mm 16# Awg(Black) Silicone

Rotor Balance: ≤5 Mg
 Motor Balance: ≤10 Mg
 Motor Mounting Holes: D:25 M3x4
 Disruptive Test: 500 V

• Highlight: Anticorrosive Brushless DC Motor,

M6C18 Brushless DC Motor, IPE V3 Brushless DC Motor



More Images









Anticorrosive M6C18 IPE V3 Brushless DC Motor

Our ANTIMATTER brand motors are defined as "not ordinary" in the field of multi-rotor motors. We are proud to launch the ANTIMATTER series motors (M6C06, M6C08, M6C10, M6C12) at the end of 2019. We spent a year designing and proving which drone motors are the most efficient with 21-24in props. This is the magic! MAD Components in Poland.

Antimatter M6C18 EEE is designed to carry a payload of 3.5-5kg, supports 6S-12S voltage.

Power and torque: Compared to the M6C12 and M6C15, the M6C18 can provide higher power output and torque, making it suitable for more demanding applications.

Efficiency: Brushless design ensures high efficiency, reduces energy loss and improves overall performance.

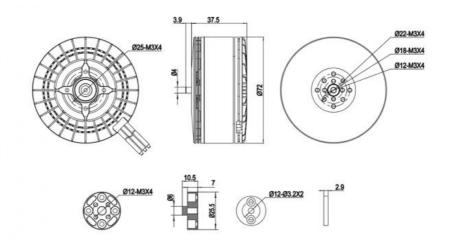
Durability: Enhanced durability, anti-corrosion function, suitable for harsh environments.





Motor Data			
Motor Model	MAD M6C18 IPE V3.0	Number of pole pairs	14
Stator	TAIWAN / Anticorrosive	Varnished wire Degree	180°C
Motor Size	D:72 × 41.4 mm	Magnet Degree	150°C
Degree of Protection	IP45	Cable Length	150 mm 16# Awg(Black) silicone
Centrifugal Heat Dissipation	YES	Rotor Balance	≤5 mg
Propeller Mounting Holes	D:12 M3×4, D:18 M3×4, D:22 M3×4	Motor Balance	≤10 mg
Shaft Diameter	IN: 6 mm	Motor Mounting Holes	D:25 M3×4
Bearing	EZO 696ZZ *2	Disruptive test	500 V
Additional Accessories	M6 Prop Adapter *1, M6 Propeller Plate * M3*10mm *4 Motor Screws. M3*6mm *4		Bullet Connector*3, Heat Shrinkable Tube

Specifications			
RPM/V	170KV	Nominal Voltage	12S lipo battery
No Load Current	1.6A / 30V	Internal resistance	48mΩ
Motor Weight	380 g	Product Boxed Weight	539g (110 x 110 x 55 mm)
Maximum Current	73.1 A	Maximum Power	3429W
Maximum thrust	13.3 kg	Maximum Torque	4.28 Nm
Recommended ESC	MAD AMPX 80A (5-145)	Recommended Propellers	21x6.3 22x6.6 22,1x7.4 22.2X7.2 24x7.5
UAV take-off weight	65-22"/ 13kgQuadcopter 19.5kgHexacopter 26kgOctocopter	Single rotor take-off weight	4kg ~ 6kg



MAD M6C18 IPE 170KV FLUXER PRO 21x6.3 MATT AMPX 80A (5-14S)

12S MAX 68°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust (gf)	Efficiency [%]	Efficiency [gf/W]
30	48.14	1.91	92.0	53.5	0.219	2334	925	58.6	10.1
35	48.13	2.62	126.0	82.2	0.293	2677	1230	65.65	9.8
40	48.11	3.51	168.9	116.8	0.369	3019	1550	69.44	9.2
45	48.09	4.72	226.8	167.4	0.469	3407	2022	74.02	8.9
50	48.06	6.18	296.9	228.3	0.576	3786	2491	77.08	8.4
55	48.03	7.94	381.5	305.6	0.705	4141	3001	80.17	7.9
60	48	9.9	475.4	388.1	0.830	4463	3507	82.11	7,4
65	47.96	12.01	575.9	478.3	0.960	4757	4169	84.76	7,4
70	47.93	14.18	679.7	565.2	1.064	5072	4534	84.8	6.8
75	47.89	16.55	792.3	665.3	1,183	5368	4876	85.56	6.3
80	47.85	19.24	920.5	778.5	1.311	5671	5367	86.09	5.9
85	47.76	22.78	1088.2	928.7	1,486	5970	6157	86.72	5.8
90	47.71	26.7	1273.8	1085.6	1.655	6262	7018	86,48	5.6
95	47.66	30.41	1449.3	1229.5	1.789	6563	7605	86	5.3
100	47.53	36.71	1745.0	1485.0	2.048	6924	8512	86.05	4.9

MAD M6C18 IPE 170KV FLUXER PRO 22x6.6 MATT AMPX 80A (5-14S)

12S MAX 78°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust (gf)	Efficiency [%]	Efficiency [gf/W]
30	48.14	2.18	105.1	67.2	0.275	2332	1064	64.23	10.2
35	48.12	2.96	142.4	97.9	0.351	2661	1371	69.08	9.7
40	48,1	4.12	198.2	145.3	0.466	2978	1743	73.54	8.8
45	48.08	5.45	261.9	201.0	0.572	3354	2163	76.94	8.3
50	48.04	7.21	346.3	277.0	0.711	3718	2720	80.13	7.9
55	48.01	9.05	434.3	354.2	0.827	4088	3134	81.62	7.2
60	47.98	11.29	541.5	447.9	0.975	4385	3945	84.46	7.4
65	47.94	14.03	672.6	561.5	1.145	4684	4439	85.17	6.7
70	47.89	16.22	777.0	654.3	1.258	4967	5067	85.8	6.6
75	47.83	19.84	949.2	802.6	1.461	5245	5821	86.06	6.2
80	47.78	22.8	1089,1	924.5	1.590	5551	6396	86.26	6.0
85	47.7	26.38	1258.7	1071.7	1.753	5839	7015	86.41	5.7
90	47.64	30.72	1463.6	1243.1	1.941	6117	7702	86.09	5.3
95	47.56	35.4	1683.7	1426.4	2.132	6389	8517	85.69	5.1
100	47.43	42.01	1992.4	1688.1	2.395	6732	9593	85.48	4.9

12S MAX 83°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust (gf)	Efficiency [%]	Efficiency [gf/W]
30	48.13	2.57	123.6	83.4	0.347	2297	1286	67.85	10.5
35	48.11	3.55	170.9	121.2	0.441	2625	1670	71.28	9.8
40	48.1	4.63	222.5	165.7	0.538	2942	1927	74.71	8.7
45	48.07	6.18	297.1	230.5	0.672	3275	2483	77.75	8.4
50	48.03	8.16	391.7	314.6	0.825	3640	2974	80.4	7.6
55	47.99	10.63	510.0	417.2	1.001	3980	3631	83.4	7.3
60	47.95	13.32	638.9	527.1	1.173	4292	4553	84.17	7.3
65	47.9	15.9	761.7	630.0	1,309	4596	4942	84.31	6.6
70	47.84	19.04	911.1	762.3	1.498	4859	5563	85.18	6.2
75	47.79	22.53	1076.8	900.8	1.674	5139	6136	85.04	5.8
80	47.72	26.48	1263.6	1052.7	1,860	5406	6913	84,58	5.6
85	47.65	30.48	1452.4	1212.8	2.040	5677	7484	84,65	5.2
90	47.56	35.32	1679.8	1395.4	2.242	5944	8223	84,04	5.0
95	47.48	40.38	1917.6	1590.6	2.451	6197	8867	83.77	4.7
100	47.33	48.87	2313.0	1908.6	2.806	6496	10090	83.07	4.4

MAD M6C18 IPE 170KV HAVOC 22x7.0 folding AMPX 80A (5-14S)

12S MAX

Throttle Voltage Current "Power Output Power Torque RPM Thrust Efficiency Efficiency.
[%] [V] [A] [W] [MM] [N×m] (gf) [%) [gf/W]

217221			100		200.00				
30	48.13	2.91	139.9	98.0	0.411	2277	1465	70.42	10.5
35	48.11	4.01	193.1	141.3	0.522	2584	1823	73.46	9.5
40	48.09	5.52	265.5	203.2	0.677	2868	2370	76,77	9.0
45	48.05	7.43	356.7	282.3	0.849	3177	3039	79.24	8,5
50	48	9.84	472.6	380.6	1.027	3540	3714	80.59	7.9
55	47.97	12.46	597.7	490.7	1.205	3890	3997	83.8	6.8
60	47.92	15.45	740.5	611.5	1.391	4198	4697	84.2	6,5
65	47.85	19.07	912.3	753.5	1.610	4470	5427	84.07	6.1
70	47.79	22.82	1090.8	901.6	1.823	4724	6310	84.04	5.9
75	47.72	26.38	1259.0	1038.3	1.994	4973	6869	83.74	5.5
80	47.65	31,21	1487.3	1225.3	2.232	5243	7771	83.51	5.3
85	47.55	35.88	1705.9	1405.8	2.441	5500	8596	83.34	5.1
90	47.46	41.49	1969.3	1615.0	2.692	5728	9484	82.77	4.9
95	47.34	46.72	2211.7	1798.0	2.868	5987	9599	81.86	4.4
100	47.21	55.04	2598.6	2095.0	3,180	6292	10797	80.95	4.2

MAD M6C18 IPE 170KV CF FLUXER 22.2x7.2 folding AMPX 80A (5-14S)

MAX 125 76℃

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust (gf)	Efficiency [%]	Efficiency [gf/W]
30	48.14	2.26	108.9	71.6	0.294	2323	1115	66.34	10.3
35	48.12	3.17	152.4	107.5	0.388	2646	1459	70.95	9.6
40	48.1	4.24	203.9	149.4	0.480	2969	1803	73.54	8.9
45	48.08	5.63	270.9	210.4	0.603	3330	2335	77.89	8.7
50	48.05	7.43	357.1	285.8	0.739	3692	2879	80.18	8.1
55	48	9.69	465.2	382.2	0.902	4045	3443	82.3	7.4
60	47.97	11.88	570.0	472.6	1.036	4357	4055	84.65	7.3
65	47.94	14.31	686,1	571,2	1,170	4664	4697	84.93	7.0
70	47.88	17.08	818.0	683.1	1.320	4940	5258	85.07	6.6
75	47.82	20.36	973.3	815.9	1.492	5222	5992	85.29	6.3
80	47.77	23.93	1143.4	964.8	1.671	5512	6330	85.75	5.6
85	47.7	27.84	1327.9	1120.1	1,846	5795	7349	85.6	5.6
90	47.62	31.87	1517.5	1286.9	2.021	6079	8051	85.88	5.4
95	47.52	37.43	1778.6	1496.9	2.262	6319	9042	85.07	5.1
100	47.4	45.03	2134,8	1791.5	2.577	6639	10168	84.61	4.8

MAD M6C18 IPE 170KV HAVOC 24x7.5 folding AMPX 80A (5-14S)

MAX 125 HOT

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.12	3.67	176.5	132.6	0.570	2220	1862	75.43	10.6
35	48.09	5.14	247.4	191.7	0.729	2513	2385	77.7	9.7
40	48.05	7.07	339.6	268.1	0.921	2780	3009	79.17	8.9
45	48.01	9.33	448.0	360.2	1.120	3070	3619	80.46	8.1
50	47.96	12.55	602.1	491.0	1.379	3401	4504	83.25	7.6
55	47.9	16.54	792.2	649.7	1.666	3724	5397	83.59	6.9
60	47.82	20.7	990.0	812.0	1.944	3988	6381	83,43	6.6
65	47.74	25	1193.8	972.6	2.192	4237	7102	82.75	6.0
70	47.66	30.59	1458.2	1176.7	2.517	4464	8037	81.8	5.6
75	47.56	35.11	1669.9	1339.1	2.731	4683	8647	81.14	5.2
80	47.47	40.64	1929,4	1531.3	2.994	4885	9667	80.14	5.1
85	47.34	47.52	2249.7	1763.4	3.302	5100	10540	78.92	4.7
90	47.21	54.46	2571.1	1987.1	3.596	5277	11648	77.6	4.6
95	47.08	62.4	2937.7	2224.4	3.907	5437	12479	75.82	4.3
100	46.87	73.14	3428.5	2533.2	4.276	5657	13259	75.25	3.9

The above data are the theoretical values when the input voltage is 48V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 73A is non-working zone.25-73A is short-term (about 10-30s), working zone, and below 25A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

M6C18

ENERGY EFFICIENT 330KV INDUSTRY PROFESSIONAL EDITION

4.0~5.0 kgf

RECOMMENDED HOVER THRUST

9.4 kgf

MAXIMUM MAXIMUM BRAIST MAY ISERBOOK THRUST

THRUST BATTER/ORD JASSPALER THRE.

ARTHRESSER REGORDER CORREST.



optimized $390\,g$ efficiency >73%

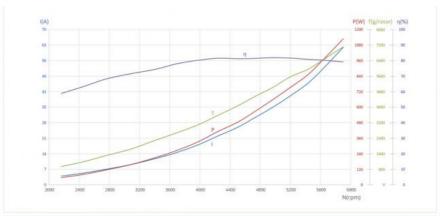


MAD M6C18 IPE 330KV FLUXER PRO 22x6.6 MATT AMPX 80A (5-14S)

65

MAX 62°C

I – Current, P – Input Power, η – Electrical Efficiency, T – Thrust. N – Rotational Speed
The data above was measured with an input voltage of 24 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



Specifications			
RPM/V	330KV	Nominal Voltage	6S lipo battery
No Load Current	3.4A / 20V	Internal resistance	10.5mΩ
Motor Weight	390 g	Product Boxed Weight	549g (110 x 110 x 55 mm)
Maximum Current	96.1 A	Maximum Power	2161W
Maximum thrust	9.4 kg	Maximum Torque	2.93 Nm
Recommended ESC	MAD AMPX 80A (5-14S) AMPX 120A (5-14S)	Recommended Propellers	21x6.3 22x6.6 22.1x7.4
UAV take-off weight	65-22"/ 11kgQuadcopter 16.5kgHexacopter 22kgOctocopter	Single rotor take-off weight	4kg - Skg

MAD M6C18 IPE 330KV FLUXER PRO 21x6.3 MATT AMPX 80A (5-14S)

6S MAX 55°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust (gf)	Efficiency [%]	Efficiency [gf/W]
30	24.19	3.37	81,5	44.0	0.194	2163	790	54.73	9.8
35	24.17	4.56	110.1	65.1	0.251	2476	1094	59.62	10.0
40	24.13	6.32	152.5	99.5	0.340	2793	1459	65.84	9.7
45	24.1	8.05	194.0	131.9	0.403	3128	1790	68.39	9.3
50	24.06	10.37	249.5	179.6	0.495	3468	2022	72.3	8.1
55	24.01	13.05	313.3	234.0	0.595	3756	2592	74.79	8.3
60	23.97	15.92	381.7	289.5	0.682	4053	2996	79.08	8.2
65	23.91	18.98	453.8	349.6	0.772	4327	3247	80,12	7.4
70	23.85	22.58	538.6	420.1	0.875	4586	3745	80.92	7.2
75	23.79	26.44	629.0	491.4	0.971	4831	4176	80.82	6.9
80	23.72	30.55	724.6	572.0	1,075	5082	4688	81.43	6.7
85	23.63	35.46	838.0	667.5	1.195	5332	4991	81.85	6.1
90	23.56	39.87	939.2	745.7	1.274	5591	5243	81.32	5.7
95	23.44	46.16	1082.1	862.4	1,418	5810	5992	81,23	5.6
100	23.28	55.06	1282,0	1012.9	1,589	6086	6805	79.96	5.4

MAD M6C18 IPE 330KV FLUXER PRO 22x6.6 MATT AMPX 80A (5-14S)

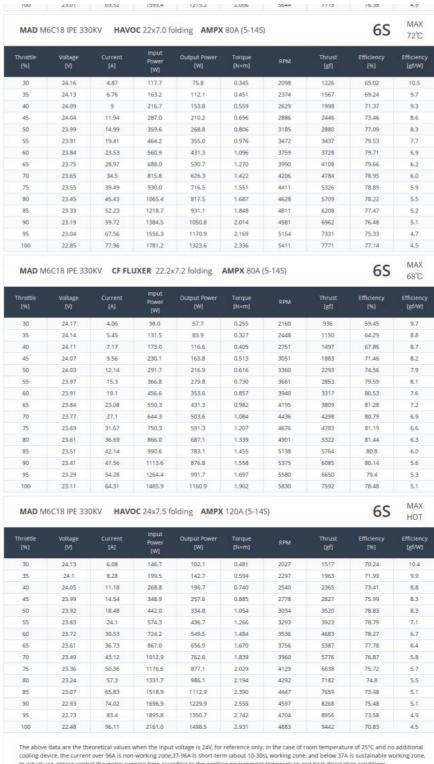
6S MAX 62°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	24.18	3.93	95.0	55.3	0.244	2164	941	58.8	10.0
35	24.15	5.28	127.5	79.9	0.311	2455	1186	63.22	9.4
40	24.12	7.04	169.8	115.0	0.398	2761	1511	68.17	9.0
45	24.08	9.09	219.0	155.7	0.482	3081	1835	71.49	8.4
50	24.04	11.73	282.1	209.0	0.586	3404	2286	74.28	8.1
55	23.99	14.59	350.1	265.7	0.686	3697	2682	77.94	7.9
60	23.93	18.14	434.2	334.6	0.802	3985	3104	80.23	7.4
65	23.86	22.01	525.3	412.2	0.928	4240	3579	81.45	7.1
70	23.8	25.9	616,3	483.5	1.026	4500	4064	81.2	6.8
75	23.72	30.18	715.7	564.4	1.141	4724	4537	81.34	6.5
80	23.64	34.81	822.9	655.1	1.261	4960	5001	81.83	6.3
85	23.54	40.22	947.0	754.7	1.385	5205	5574	81,56	6.0
90	23.45	45.68	1071.3	849.1	1.494	5429	5941	80.8	5.7
95	23.32	52.34	1220.8	965.9	1.637	5633	6435	80.23	5.3
100	23.14	61.99	1434.8	1128.2	1.826	5901	7109	79.1	5.0

MAD M6C18 IPE 330KV CF FLUXER 22.1x7.4 VTOL AMPX 80A (5-14S)

6S MAX 69°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	24.17	4.21	101.7	61.4	0.276	2127	972	61.03	9.7
35	24.14	5.77	139.4	89.5	0.354	2416	1293	64.77	9.4
40	24.11	7.74	186.7	127.7	0.449	2714	1629	68.76	8.8
45	24.07	10.15	244.3	173.9	0.555	2991	2101	71.46	8.6
50	24.02	12.94	310.7	230.1	0.668	3287	2525	74.18	8.1
55	23.96	16.29	390.3	294.8	0.783	3593	2952	78.75	7.9
60	23.89	20.35	486.2	374.1	0.926	3857	3560	79.94	7.6
65	23.82	24.81	590.9	455.4	1.057	4115	4051	79.83	7.1
70	23.74	29.06	689.9	536.2	1.175	4358	4411	80.25	6.6
75	23.65	34.26	810.2	628.9	1.313	4573	5032	79.82	6.4
80	23.55	39.63	933.2	724.7	1.447	4783	5479	79.51	6.0
85	23.45	45.17	1059.2	821.1	1.566	5007	5812	79.03	5.6
90	23.33	51.88	1210.6	934.7	1.709	5221	6395	78.3	5.4
95	23.21	58.61	1360.5	1046.0	1.844	5417	6980	77.56	5.2
100	22.01	60.53	1500.4	1215.2	2.006	5544	7749	76.20	4.0



The above data are the theoretical values when the input voltage is 24V, for reference only, in the case of room temperature of 25°C and no additional cooling device, the current over 96A is non-working zone,37-96A is short-term (about 10-30s), working zone, and below 37A is sustainable working zone in actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

Our Services

- 1. We provide 1 Year Warranty. Buy with confidence.
- 2. If you are not satisfied when you receive your item, please return it within 14 days for a replacement or money back. Please contact me before you return it.
- 3. If item is defective in 3 months, We will send you a replacement without extra charger, or offer refund after we receive the defective item.
- 4. If item is defective after 3 months, you can still send it back to us. We will send you a new one after receiving the defective item. But you have to pay the extra shipping fee.



FAQ

Q1: Do you support OEM/ODM?

A1: Yes. We can print your logo on the product.

Q2: About samples.

A2: Under normal circumstances, samples will be ready within 7 days, and 10-20 days for OEM/ODM orders. Sample fee and shipping will be charged.

Q3: What is the delivery time?

A3: For regular orders, we can ship within 15 days, for OEM/ODM, we can ship within 25-45 days (depending on the quantity). In the event of delays, we will notify you in advance of the status and resolution.

Q4: What is the minimum order quantity?

A4: There is no MOQ for wholesale (1 piece accepted), including OEM/ODM.

Q5: What are your payment terms?

A5: L/C.TT100%.

Q6: Can you reduce the shipping cost?

A6: When calculating the shipping cost for you, we always choose the cheapest and safest express. Although we have partnerships with shipping companies, we can't keep costs down because it's not us who get paid. If you think it's expensive for you. You can always make your own choice.

Q7: Return policy.

A7: If you want to replace the received item, you must contact us within 7 days after receiving the item. Returned items should be in their original condition and you should pay for additional shipping.



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