M17 PRO IPE Brushless DC Motor 15mm Shaft Diameter

Our Product Introduction

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: M17 PRO IPE 100KV 110KV
- Price: Negotiable
- Delivery Time: 6-8
- Payment Terms: T/T
- Supply Ability: 100

Product Specification

- Motor Model: M17 IPE V1.1
- Motor Size: D:118 X41.3 Mm
- Propeller Mounting Holes: D:23 M3x4
- Shaft Diameter: IN: 15 Mm
- Bearing: 6902ZZ*2
- Cable Length: 150 Mm (extended Enameled Wires)
- Rotor Balance: ≤10 Mg
- Motor Balance: ≤20 Mg
- Motor Mounting Holes: D:40 M4x4, D:50 M4x4
- Disruptive Test: 500 V
- Highlight: **M17 PRO Brushless DC Motor**, **M17 PRO IPE Brushless DC Motor**, **IPE Brushless DC Motor**

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Product Description

M17 PRO IPE Brushless DC Motor Drone

M Series motors are the flagship motors designed specifically for large multi-rotor electric paragliders, large agricultural tethered VTOLs, UAVs. Used for aerial photography, mapping, electric paragliding, agricultural spraying, surveying or anything in between where professional industrial grade propulsion systems are required. This type of motor is made with industrial grade components, it is for the long flight time multirotor hexacopter octocopte for the long flight time tethered drone.

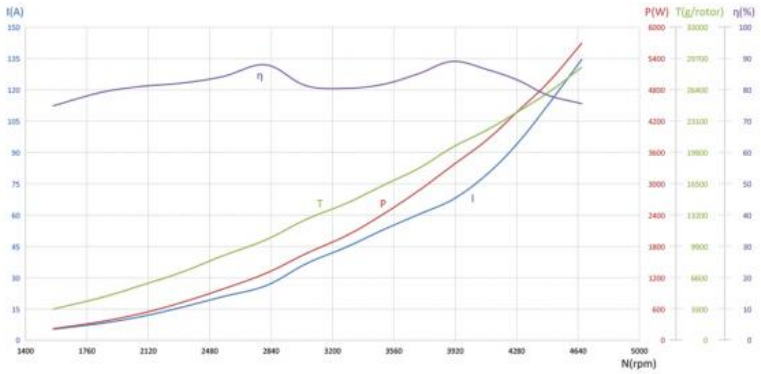
Technical specification

Voltage range: Compatible with a wide range of voltages, flexibility in drone design and power selection.
Maximum thrust: The ability to deliver significant thrust makes it ideal for heavy drones or those requiring high speed capability.
Size and weight: The design is compact and lightweight to minimize the impact on the overall weight and flight characteristics of the drone.
Propeller compatibility: Suitable for a variety of propeller sizes and types, providing versatility in drone configurations.

MAD M17 IPE 100KV **FLUXER** PRO 34x11.2 GLOSSY **AMPX** 200A (5-14S) **14S** MAX 133°C

Analytical Graph of Motor Operation

I – Current, P – Input Power, η – Electrical Efficiency, T – Thrust, N – Rotational Speed
The data above was measured with an input voltage of 48 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



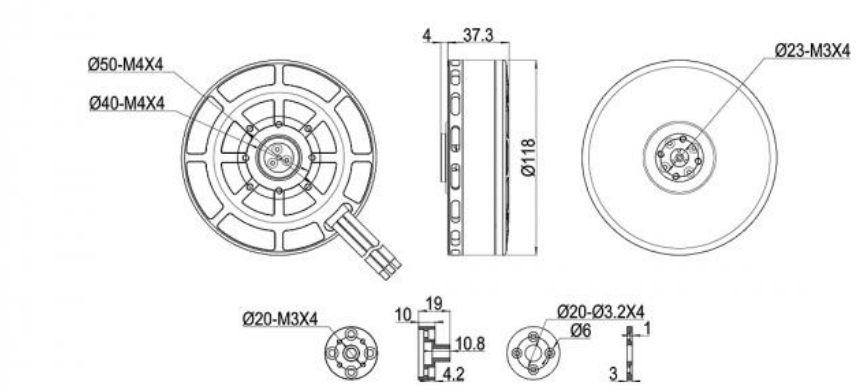
Motor Data

Motor Model	MAD M17 IPE V1.1	Number of pole pairs	15
Stator	TAIWAN / Anticorrosive	Varnished wire Degree	220°C
Motor Size	D:118 × 41.3 mm	Magnet Degree	180°C
Degree of Protection	IP35	Cable Length	150 mm (extended Enameled wires)
Centrifugal Heat Dissipation	YES	Rotor Balance	≤10 mg
Propeller Mounting Holes	D:23 M3×4	Motor Balance	≤20 mg
Shaft Diameter	IN: 15 mm	Motor Mounting Holes	D:40 M4×4, D:50 M4×4
Bearing	EZO 6902ZZ *2	Disruptive test	500 V
Additional Accessories	Propeller Plate *1, M10 Prop Adaper *1, 4.0mm Bullet Connector*3, Heat Shrinkable Tube*3, M4*10mm *4 Motor Screws, M4*10mm *4 Prop Adaper Screws, M3*14mm *4 Propeller Screws, Sticker*2		

Specifications

RPM/V	100 KV	Nominal Voltage	12-14S lipo battery
No Load Current	3.1A/30V	Internal resistance	27.5mΩ
Motor Weight	857 g	Product Boxed Weight	1240g (200 x 150 x 70 mm)
Maximum Current	134.5 A	Maximum Power	7520W
Maximum thrust	28.8 kg	Maximum Torque	11.7 Nm

Recommended ESC	MAD AMPX 120A (5-14S) AMPX 200A (5-14S)	Recommended Propellers	32x9.6, 34x11.2, 36x11.5
UAV take-off weight	14S-34"/ 30kg--Quadcopter 45kg--Hexacopter 60kg--Octocopter	Single rotor take-off weight	7kg – 9kg



MAD M17 IPE 100KV **FLUXER** PRO 32x9.6 MATT **AMPX** 120A (5-14S) **12S** MAX 74°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.21	2.99	143.6	88.6	0.629	1347	1752	61.7	12.2
35	48.21	4.12	198.2	130.7	0.815	1533	2268	65.95	11.4
40	48.2	5.74	276.2	195.8	1.070	1747	2968	70.84	10.7
45	48.2	7.87	378.8	280.7	1.362	1969	3828	74.06	10.1
50	48.15	10.14	487.7	371.8	1.645	2159	4646	76.19	9.5
55	48.17	12.84	618.1	478.0	1.943	2350	5483	77.28	8.9
60	48.2	16.77	807.9	625.1	2.335	2556	6649	77.33	8.2
65	48.14	19.72	948.9	778.8	2.686	2769	7632	82.03	8.0
70	48.16	25.3	1217.7	994.3	3.190	2977	8976	81.62	7.4
75	48.14	32.51	1564.5	1212.7	3.637	3184	10315	77.51	6.6
80	48.13	36.64	1763.1	1455.5	4.126	3369	11627	82.5	6.6
85	48.08	40.67	1954.8	1690.3	4.544	3552	12731	86.43	6.5
90	48.02	50.77	2437.6	2010.7	5.150	3729	14365	82.44	5.9
95	47.97	58.46	2803.7	2314.8	5.655	3909	15841	82.53	5.7
100	47.94	65.02	3117.0	2667.2	6.240	4082	17411	85.54	5.6

MAD M17 IPE 100KV **FLUXER** PRO 34x11.2 GLOSSY **AMPX** 120A (5-14S) **12S** MAX 92°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.21	3.58	172.1	119.3	0.882	1293	2243	69.28	13.0
35	48.2	5.29	254.5	180.9	1.163	1485	2947	71.07	11.6
40	48.22	7.52	361.8	264.3	1.489	1695	3804	73	10.5
45	48.18	10.86	522.9	391.7	1.952	1917	4940	74.88	9.4
50	48.21	14.37	692.5	514.1	2.337	2101	5944	74.23	8.6
55	48.16	18.63	896.5	667.6	2.789	2286	7108	74.43	7.9
60	48.13	23.06	1109.6	857.1	3.315	2469	8397	77.21	7.6
65	48.14	27.39	1318.2	1071.1	3.840	2664	9603	81.21	7.3
70	48.13	32.55	1566.3	1305.6	4.354	2863	11084	83.34	7.1
75	48.04	41.03	1970.7	1602.4	5.023	3047	12865	81.28	6.5
80	48.04	50.9	2444.8	1876.0	5.552	3227	14086	76.74	5.8
85	48.02	56.48	2711.4	2163.3	6.079	3398	15416	79.78	5.7
90	47.99	63.05	3025.1	2486.4	6.681	3554	16985	82.22	5.6
95	48	76.5	3671.5	2857.7	7.362	3707	18693	77.78	5.1
100	47.94	86.05	4124.9	3227.6	7.988	3858	20282	78.2	4.9

MAD M17 IPE 100KV **FLUXER** PRO 34x11.2 GLOSSY **AMPX** 200A (5-14S) **14S** MAX 133°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	55.75	5.38	299.1	224.2	1.370	1564	3306	74.92	11.0
35	55.77	8.23	458.8	364.0	1.878	1852	4549	79.3	9.9
40	55.74	11.51	641.2	520.6	2.384	2085	5838	81.14	9.1
45	55.78	15.78	879.8	722.6	2.985	2312	7159	82.13	8.1
50	55.77	20.83	1161.3	977.0	3.657	2552	8882	84.18	7.7
55	55.75	26.11	1454.7	1280.9	4.358	2807	10578	88.01	7.3
60	55.76	36.87	2055.6	1669.1	5.227	3049	12778	81.25	6.2
65	55.8	44.9	2505.2	2016.7	5.858	3287	14487	80.5	5.8
70	55.81	53.04	2959.8	2420.6	6.606	3499	16353	81.78	5.5
75	55.81	60.31	3365.8	2866.6	7.390	3704	18115	85.15	5.4
80	55.78	67.48	3764.1	3355.3	8.204	3905	20364	89.1	5.4
85	55.79	79.7	4446.1	3846.3	8.942	4108	22182	86.48	5.0
90	55.86	94.6	5283.6	4392.8	9.784	4287	24097	83.1	4.6
95	55.86	112.66	6293.2	4931.7	10.554	4462	26067	78.32	4.1
100	55.91	134.5	7520.0	5689.9	11.657	4661	28763	75.61	3.8

MAD M17 IPE 100KV **FLUXER** PRO 36x11.5 GLOSSY **AMPX** 120A (5-14S) **12S** MAX 122°C

Throttle	Voltage	Current	Input	Output Power	Torque		Thrust	Efficiency	Efficiency

[%]	[V]	[A]	Power [W]	[W]	[N×m]	RPM	[gf]	[%]	[gf/W]
30	44.17	3.66	161.3	128.2	0.971	1261	2358	79.45	14.6
35	44.19	5.65	249.3	200.9	1.323	1451	3285	80.54	13.2
40	44.19	8.68	382.9	319.7	1.815	1682	4467	83.46	11.6
45	44.17	11.84	522.5	448.1	2.286	1872	5611	85.72	10.7
50	44.21	16.16	713.9	594.5	2.763	2055	6773	83.26	9.5
55	44.18	20.01	883.5	771.0	3.290	2238	8072	87.23	9.1
60	44.2	26.35	1164.2	1010.4	3.963	2435	9610	86.8	8.3
65	44.23	34.8	1538.7	1286.0	4.668	2631	11227	83.54	7.3
70	44.22	41.33	1827.1	1603.5	5.455	2807	13110	87.74	7.2
75	44.24	51.89	2294.9	1937.9	6.223	2974	14851	84.41	6.5
80	44.27	62.69	2774.3	2274.8	6.924	3137	16112	81.99	5.8
85	44.27	74.59	3301.8	2703.4	7.879	3277	18481	81.83	5.6
90	44.3	87.58	3879.3	3094.8	8.621	3428	20046	79.75	5.2
95	44.28	97.44	4314.7	3572.0	9.584	3559	21793	82.74	5.0
100	44.36	122.62	5438.6	4199.6	10.765	3725	24431	77.18	4.5

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 123A is non-working zone,35-123A is short-term (about 10-30s), working zone, and below 35A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

M17IPE

ENERGY EFFICIENT 110KV

INDUSTRY PROFESSIONAL EDITION

7.0~9.0 kgf
RECOMMENDED HOVER THRUST

20.3 kgf
MAXIMUM THRUST
MAXIMUM THRUST MAY DEPEND ON BATTERY LEVEL,PROPELLER TYPE, AIR PRESSURE AND OTHER CONDITIONS

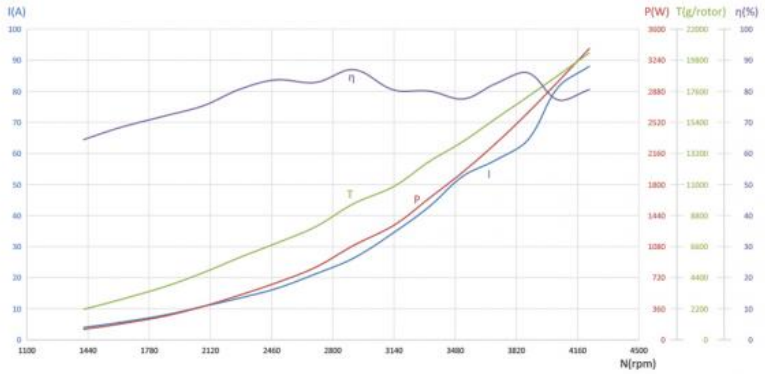
OPTIMIZED WEIGHT 860 g

EFFICIENCY >76%

MAD M17 IPE 110KV **FLUXER** PRO 32x9.6 MATT **AMPX** 120A (5-14S) **12S** MAX 98˚C

Analytical Graph of Motor Operation

I – Current, P – Input Power, η – Electrical Efficiency, T – Thrust, N – Rotational Speed
The data above was measured with an input voltage of 48 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



Specifications

RPM/V	110 KV	Nominal Voltage	12S lipo battery
No Load Current	3.6A/30V	Internal resistance	22.5mΩ
Motor Weight	860 g	Product Boxed Weight	1243g (200 x 150 x 70 mm)
Maximum Current	88 A	Maximum Power	4188W
Maximum thrust	20.3 kg	Maximum Torque	7.6 Nm
Recommended ESC	MAD AMPX 120A (5-14S)	Recommended Propellers	32x9.6
UAV take-off weight	12S-32*/ 28kg--Quadcopter 42kg--Hexacopter 56kg--Octocopter	Single rotor take-off weight	7kg – 9kg

MAD M17 IPE 110KV **FLUXER** PRO 32x9.6 MATT **AMPX** 120A (5-14S) **12S** MAX 98˚C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	47.89	3.99	190.5	122.9	0.828	1417	2165	64.46	11.4
35	47.9	5.56	266.1	181.6	1.076	1612	2823	68.22	10.6
40	47.9	7.98	381.7	275.2	1.408	1867	3766	72.06	9.9
45	47.86	10.76	514.5	387.7	1.780	2081	4758	75.33	9.3
50	47.85	13.45	642.9	518.7	2.169	2284	5836	80.65	9.1
55	47.83	16.48	787.8	659.5	2.535	2485	6836	83.67	8.7
60	47.81	21.17	1011.8	838.2	2.962	2702	7995	82.81	7.9
65	47.8	26.31	1257.2	1093.9	3.583	2916	9640	86.96	7.7
70	47.81	34.61	1653.9	1329.5	4.042	3141	10874	80.37	6.6
75	47.78	42.87	2047.6	1640.2	4.696	3336	12625	80.05	6.2
80	47.75	52.72	2516.9	1946.8	5.276	3524	14050	77.52	5.6
85	47.68	57.74	2752.7	2268.5	5.853	3701	15632	82.37	5.7
90	47.64	64.11	3053.9	2623.9	6.458	3880	17186	85.97	5.6
95	47.67	81.52	3886.0	3000.3	7.066	4055	18760	77.17	4.8
100	47.57	88.04	4187.9	3374.9	7.629	4225	20316	80.54	4.9

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 88A is non-working zone,26-88A is short-term (about 10-30s), working zone, and below 26A 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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