8116 EEE brushless DC motor

Our Product Introduction

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: 8116 EEE 100 KV
- Price: Negotiable

Product Specification

- Motor Model: 8116 EEE V1.0
- Motor Size: D:87.2 X42 Mm
- Degree Of Protection: Rain Protection
- Propeller Mounting Holes: TD:23 M4x4
- Bearing: EZ0 6802ZZ*2
- Number Of Pole Pairs: 21
- Cable Length: 150 Mm 16# Awg(Black) Silicone
- Motor Mounting Holes: D:30 M3x4, D:32 M4x4,D:50 M3x4
- Disruptive Test: 500 V
- Highlight: **Full Duplex drone video transmitter**, **drone video transmitter 20km**, **20km uav radio link**

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Our Produc

Product Description

8116 EEE brushless DC motor

It is old style popular power motor in the line. a lot of designers not only want this motor have same efficient with 8108 but also want this motor is powerful. now it is mostly used to design robotic arm motor. it is replaced by the M9C12 100KV and 90KV.

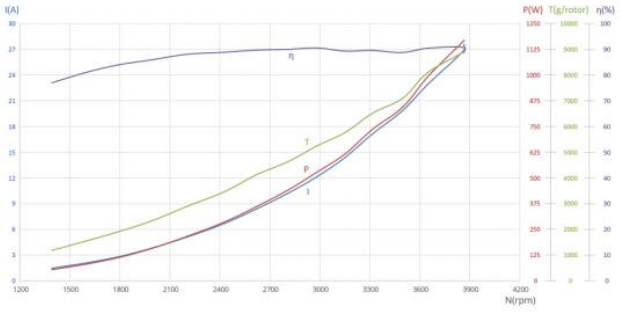
High Efficiency: Brushless design for superior efficiency, leading to reduced energy consumption and extended operational times.
High Torque: Capable of delivering substantial torque, suitable for demanding tasks.

Durability: Designed with fewer moving parts compared to brushed motors, resulting in longer lifespan and lower maintenance needs.
Precision Control: Ideal for applications that require accurate speed and position control.
Advanced Cooling: Enhanced cooling systems to manage high power outputs and prevent overheating.

MAD 8112 IPE-black 100KV **FLUXER** PRO 28x8.4 MATT **AMPX** 40A (5-14S) **12S** MAX 70℃

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.

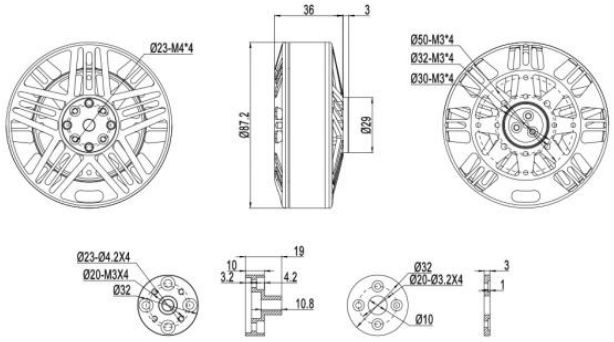


Motor Data

Motor Model	MAD 8116 EEE V1.0	Number of pole pairs	21
Stator	TAIWAN / Anticorrosive	Varnished wire Degree	180°C
Motor Size	D:87.2 × 42 mm	Magnet Degree	150°C
Degree of Protection	Rain protection	Cable Length	150 mm 16# Awg(Black) silicone
Centrifugal Heat Dissipation	Independent	Rotor Balance	≤10 mg
Propeller Mounting Holes	D:23 M4×4	Motor Balance	≤20 mg
Shaft Diameter	IN: 15 mm	Motor Mounting Holes	D:30 M3×4, D:32 M4×4, D:50 M3×4
Bearing	EZO 6802ZZ*2	Disruptive test	500 V
Additional Accessories	Propeller Plate *1, 3.5mm Bullet Connector*3, Heat Shrinkable Tube*3, Paddle seat*1 M3*10mm *4 Paddle seat Screws, M4*10mm *4 Motor Screws, M3*14mm *4 Propeller Screws, Sticker*2		

Specifications

RPM/V	100 KV	Nominal Voltage	12S lipo battery
No Load Current	0.9A/20V	Internal resistance	80mΩ
Motor Weight	460 g	Product Boxed Weight	760g (110 x 110 x 65 mm)
Maximum Current	38.3 A	Maximum Power	1822W
Maximum thrust	11.5 kg	Maximum Torque	4.1 Nm
Recommended ESC	MAD AMPX 40A (5-14S)	Recommended Propellers	28x8.4，29x8.7，30x10.0，32x9.6
UAV take-off weight	12S-29"/ 16kg--Quadcopter 24kg--Hexacopter 32kg--Octocopter	Single rotor take-off weight	4.0kg ~ 5.4kg



MAD 8116 EEE 100KV **FLUXER** PRO 28x8.4 MATT **AMPX** 40A (5-14S) **12S** MAX 79℃

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.13	1.38	66.1	49.2	0.335	1401	1038	74.29	15.6
35	48.12	1.95	93.2	73.8	0.435	1621	1368	79.17	14.6
40	48.13	2.58	123.8	101.5	0.535	1812	1727	81.99	13.9
45	48.11	3.43	164.8	137.6	0.656	2005	2124	83.47	12.9
50	48.1	4.57	219.1	188.0	0.805	2231	2578	85.73	11.7
55	48.1	6.09	292.3	256.5	0.997	2456	3164	87.71	10.8
60	48.08	7.64	366.9	325.4	1.170	2655	3716	88.65	10.1
65	48.02	9.29	445.5	399.4	1.340	2846	4232	89.61	9.5
70	48	10.93	524.1	474.0	1.494	3030	4758	90.4	9.1
75	47.99	12.88	617.4	558.9	1.668	3200	5348	90.48	8.7
80	47.98	15.22	729.4	660.6	1.865	3383	5878	90.52	8.1
85	47.94	17.81	853.3	778.9	2.095	3551	6644	91.24	7.8
90	47.86	20.24	968.4	904.3	2.319	3723	7312	93.34	7.5
95	47.81	24.06	1149.8	1075.0	2.609	3935	8219	93.46	7.1
100	47.81	24.5	1170.5	1072.6	2.604	3933	8309	91.59	7.1

MAD 8116 EEE 100KV **FLUXER** PRO 29x8.7 MATT **AMPX** 40A (5-14S) **12S** MAX 92℃

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.13	1.47	70.5	54.3	0.373	1392	1183	77	16.7
35	48.12	2.13	102.0	82.9	0.492	1610	1570	81.23	15.3
40	48.12	2.84	136.1	114.5	0.608	1799	1924	84.05	14.1
45	48.11	3.8	182.2	156.5	0.752	1988	2322	85.88	12.7
50	48.1	5.11	245.2	216.1	0.937	2203	2894	88.07	11.8
55	48.08	6.69	321.2	285.6	1.124	2427	3461	88.86	10.8
60	48.09	8.4	403.1	361.6	1.317	2622	4130	89.69	10.2
65	48.01	10.2	489.2	440.4	1.498	2808	4626	89.98	9.5
70	48	12.13	581.9	527.1	1.688	2982	5238	90.53	9.0
75	47.98	14.38	689.5	616.1	1.868	3151	5761	89.31	8.4
80	47.97	17.13	821.1	735.8	2.119	3316	6511	89.56	7.9
85	47.87	19.81	947.7	841.7	2.300	3494	7084	88.77	7.5
90	47.86	22.89	1095.1	990.5	2.594	3647	8088	90.41	7.4
95	47.81	26.93	1287.1	1168.4	2.886	3866	8910	90.74	6.9
100	47.82	27.57	1317.9	1169.1	2.889	3865	8952	88.69	6.8

MAD 8116 EEE 100KV **FLUXER** PRO 30x10.0 MATT **AMPX** 40A (5-14S) **12S** MAX 99℃

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.14	1.74	83.4	66.2	0.465	1361	1381	79.4	16.5
35	48.13	2.56	122.8	102.5	0.619	1581	1824	83.43	14.8
40	48.12	3.44	165.0	140.9	0.762	1767	2156	85.33	13.0
45	48.1	4.61	221.4	191.4	0.937	1951	2640	86.42	11.9
50	48.1	6.06	290.7	257.6	1.143	2153	3241	88.56	11.1
55	48.08	7.91	380.0	337.3	1.365	2361	3990	88.74	10.5
60	48.02	10.06	482.8	427.7	1.602	2549	4734	88.53	9.8
65	48	12.29	589.4	523.5	1.835	2725	5347	88.77	9.1
70	47.98	14.75	707.2	627.0	2.075	2885	5927	88.62	8.4
75	47.98	17.29	828.9	732.3	2.295	3047	6660	88.29	8.0
80	47.88	20.06	960.0	862.4	2.575	3199	7444	89.79	7.8
85	47.84	23.07	1103.4	987.1	2.804	3361	8157	89.42	7.4
90	47.79	26.85	1282.6	1141.5	3.106	3510	8970	88.96	7.0
95	47.71	31.86	1519.8	1339.2	3.441	3717	9807	88.07	6.5
100	47.72	33.49	1597.8	1346.4	3.468	3708	9981	84.22	6.2

MAD 8116 EEE 100KV **FLUXER** PRO 32x9.6 MATT **AMPX** 40A (5-14S) **12S** MAX 108℃

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.13	1.95	92.9	76.5	0.547	1337	1571	82.29	16.8
35	48.11	3.05	146.4	122.4	0.750	1559	2142	83.67	14.6
40	48.12	4.19	200.9	173.0	0.954	1732	2677	86.08	13.3
45	48.1	5.5	264.4	230.2	1.153	1908	3259	87.03	12.3
50	48.08	7.24	347.7	306.0	1.396	2093	3967	87.98	11.4
55	48.02	9.38	449.8	396.0	1.654	2286	4631	87.99	10.3
60	48	11.9	570.7	501.3	1.939	2469	5436	87.78	9.5
65	47.98	14.47	693.7	608.5	2.206	2635	6128	87.69	8.8
70	47.96	17.21	824.8	719.1	2.457	2795	6959	87.15	8.4
75	47.89	20.92	1001.4	856.8	2.793	2930	7835	85.53	7.8
80	47.84	23.79	1137.8	985.0	3.053	3081	8521	86.55	7.5
85	47.78	27.25	1301.6	1122.8	3.323	3227	9370	86.24	7.2
90	47.73	32.38	1545.3	1295.1	3.673	3367	10174	83.76	6.6
95	47.61	37.45	1782.3	1514.5	4.089	3537	11389	84.95	6.4
100	47.61	38.28	1821.8	1534.5	4.142	3537	11502	84.2	6.3

The above data are the theoretical values when the input voltage is 48 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 38A is non-working zone,14-38A is short-term (about 10-30s), working zone, and below 14A 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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