M8C10 EEE Brushless DC Motor With 80mm 16 Awg Black Silicone Cable

Our Product Introduction

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: M8C10 EEE 90KV 100KV
- Price: Negotiable
- Delivery Time: 6-8
- Payment Terms: T/T
- Supply Ability: 100

Product Specification

- Motor Model: M8C10 EEE V2.0
- D87.1 X26.7 MmMotor Size: D:87.1 X28.7 Mm
- Propeller Mounting Holes: D:20 M3x4. D:23 M4x4
- Shaft Diameter: IN: 15 Mm
- Bearing: 6802ZZ*2
- Cable Length: 80 Mm 16# Awg(Black) Silicone
- Rotor Balance: ≤5 Mg
- Motor Balance: ≤10 Mg
- Motor Mounting Holes: D:36 M4x4, D:48 M3x4
- Disruptive Test: 500 V
- Highlight: **EEE Brushless DC Motor**, **M8C10 Brushless DC Motor**, **M8C10 EEE Brushless DC Motor**

More Images

Our Product Introduction

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Product Description

M8C10 EEE Brushless DC Motor

M8C10 motor is the most classic product among UAV motors. MAD COMPONENTS M8C10 is one of the most efficient motors among them, and the most widely used motors for UAV of high-end aerial photography, exploration, archaeology, remote sensing surveying, mapping etc. Endurance flight time varies from 30-120min.

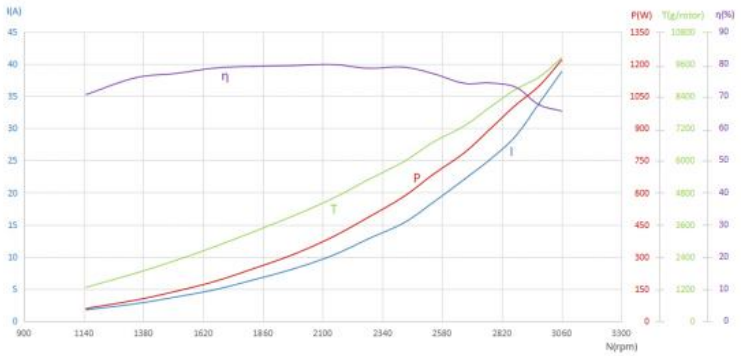
Performance characteristics

Efficiency: High efficiency, lower power consumption and heat output.
Noise level: Designed to minimize noise during operation.
Thermal Management: Features to manage and efficiently dissipate heat, maintaining optimal performance.

MAD M8C10 EEE 90KV **FLUXER** PRO 32x9.6 MATT **AMPX** 60A (5-14S) HV **12S** MAX 83°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.

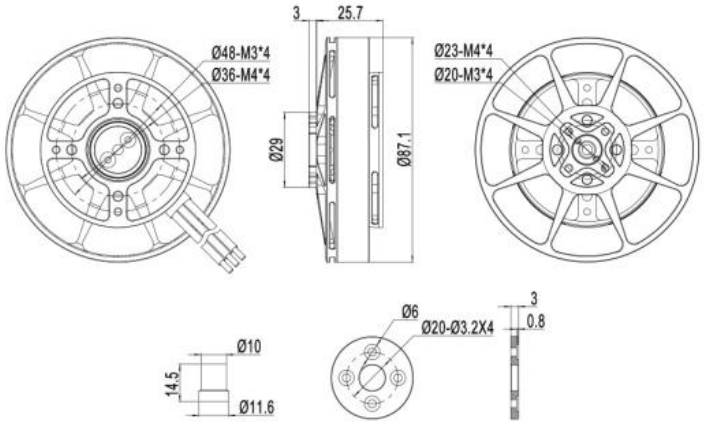


Motor Data

Motor Model	MAD M8C10 EEE V1.0	Number of pole pairs	21
Stator	TAIWAN / Anticorrosive	Varnished wire Degree	180°C
Motor Size	D:87.1 × 28.7 mm	Magnet Degree	150°C
Degree of Protection	Rain protection	Cable Length	80mm 16# Awg(Black) silicone
Centrifugal Heat Dissipation	Independent	Rotor Balance	≤5 mg
Propeller Mounting Holes	D:20 M3×4, D:23 M4×4	Motor Balance	≤10 mg
Shaft Diameter	IN: 15 mm	Motor Mounting Holes	D:36 M4×4, D:48 M3×4
Bearing	EZO 6802ZZ*2	Disruptive test	500 V
Additional Accessories	Propeller Plate *1, Locating Pin *1, M4*10mm *4 (Motor Screws), M3*14mm *4 (Propeller Screws), 3.5mm Bullet Connector *3, Heat Shrinkable Tube *3, Sticker*2.		

Specifications

RPM/V	90 KV	Nominal Voltage	12S lipo battery
No Load Current	0.82A/30V	Internal resistance	122 mΩ
Motor Weight	298 g	Product Boxed Weight	548g (150 x 150 x 65 mm)
Maximum Current	38.8 A	Maximum Power	1863W
Maximum thrust	9.8 kg	Maximum Torque	3.8Nm
Recommended ESC	MAD AMPX 40A (5-14S) HV	Recommended Propellers	32X12，32x9.6
UAV take-off weight	12S-32"/ 16kg--Quadcopter 24kg--Hexacopter 32kg--Octocopter	Single rotor take-off weight	3kg ~ 4.5kg



MAD M8C10 EEE 90KV **CB2** 32X12 MATT **AMPX** 40A (5-14S) HV **12S** MAX 82°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.09	1.7	81.7	61.9	0.539	1096	1343	76.21	16.5
35	48.09	2.62	125.8	95.2	0.719	1265	1793	76.01	14.3
40	48.08	3.87	186.1	142.6	0.940	1449	2372	76.76	12.8
45	48.08	5.03	241.8	186.9	1.125	1587	2833	77.44	11.7
50	48.07	6.67	320.8	247.6	1.376	1718	3402	77.27	10.6
55	48.06	8.34	400.9	311.1	1.595	1862	4002	77.65	10.0
60	48.06	10.4	499.6	388.6	1.854	2001	4604	77.81	9.2
65	48.06	12.99	624.3	478.9	2.144	2133	5302	76.71	8.5
70	48.06	15.74	756.2	575.7	2.437	2256	6038	76.12	8.0
75	48.03	18.67	897.0	670.5	2.695	2376	6660	74.74	7.4
80	48.01	21.9	1051.4	764.4	2.936	2486	7236	72.69	6.9
85	48	25.57	1227.3	866.5	3.210	2578	7917	70.58	6.5
90	47.99	28.83	1383.7	957.3	3.423	2671	8404	69.16	6.1
95	48	33.61	1613.4	1039.6	3.628	2736	8975	64.42	5.6
100	47.94	37.69	1807.0	1106.8	3.789	2789	9269	61.22	5.1

MAD M8C10 EEE 90KV **FLUXER** PRO 32x9.6 MATT **AMPX** 40A (5-14S) HV **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	48.18	1.75	84.4	59.0	0.490	1150	1262	70.48	15.0
35	48.18	2.72	130.8	98.7	0.697	1352	1797	75.77	13.7
40	48.18	3.77	181.8	139.8	0.882	1513	2276	77.09	12.5
45	48.19	4.9	236.1	185.6	1.063	1668	2783	78.72	11.8
50	48.2	6.43	309.9	245.6	1.285	1824	3343	79.29	10.8
55	48.16	8.11	390.8	310.4	1.496	1981	3925	79.49	10.0
60	48.16	10.22	492.0	392.7	1.753	2140	4575	79.84	9.3
65	48.15	12.78	615.3	484.0	2.025	2283	5277	78.68	8.6
70	48.17	15.3	737.0	582.2	2.291	2427	5958	78.99	8.1
75	48.13	18.46	888.8	684.3	2.569	2544	6679	77.01	7.5
80	48.12	22.11	1064.0	787.3	2.815	2671	7295	73.98	6.9
85	48.11	25.18	1211.2	897.7	3.090	2774	7998	74.09	6.6
90	48.09	28.72	1381.3	1006.2	3.343	2874	8641	72.84	6.3
95	48.1	33.95	1633.4	1098.9	3.532	2971	9120	67.25	5.6
100	48.03	38.78	1862.7	1218.0	3.800	3060	9827	65.36	5.3

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 39A is non-working zone,13-39A is short-term (about 10-30s), working zone, and below 13A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

M8C10

ENERGY EFFICIENT 100KV

ENTHUSIASTS EXTREME EDITION

4.0~5.5 kgf
RECOMMENDED HOVER THRUST

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

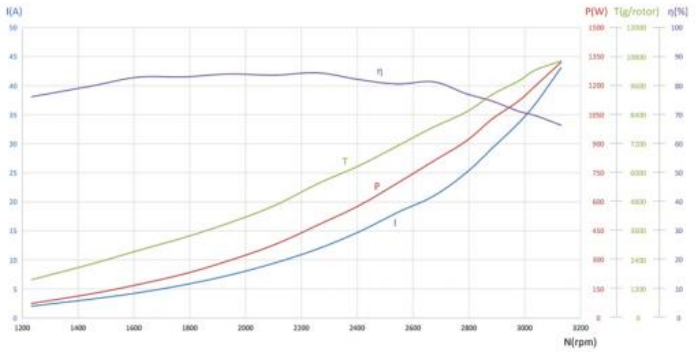
OPTIMIZED WEIGHT 290g

EFFICIENCY >78%

MAD M8C10 EEE 100KV **FLUXER** PRO 30x10 MATT **AMPX** 60A (5-14S) HV **12S** MAX 90°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	100 KV	Nominal Voltage	12S lipo battery
No Load Current	0.93A/30V	Internal resistance	110 mΩ
Motor Weight	290 g	Product Boxed Weight	551g (150 x 150 x 65 mm)
Maximum Current	45.5 A	Maximum Power	2089W
Maximum thrust	10.6 kg	Maximum Torque	4.0Nm
Recommended ESC	MAD AMPX 60A (5-14S) HV	Recommended Propellers	28x12，29x9.6，30x10.0，32x9.6
UAV take-off weight	12S-30*/ 16kg--Quadcopter 24kg--Hexacopter 32kg--Octocopter	Single rotor take-off weight	4kg – 5.5kg

MAD M8C10 EEE 100KV **CB2** 28x12 MATT **AMPX** 60A (5-14S) HV **12S** MAX 88˚C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.08	1.86	89.4	66.9	0.506	1263	1337	75.5	15.1
35	48.05	2.98	143.2	111.7	0.717	1489	1934	78.12	13.5
40	48.03	4.01	192.7	152.6	0.878	1661	2393	79.43	12.5
45	48.01	5.29	zui	204.3	1.063	1834	2934	80.62	11.6
50	47.98	6.78	325.5	265.8	1.267	2004	3478	83.41	10.9
55	47.94	8.74	419.0	342.6	1.496	2188	4096	83.48	10.0
60	47.9	11.07	530.2	431.8	1.746	2362	4773	83.04	9.2
65	47.86	13.62	652.0	526.6	1.994	2522	5448	82.22	8.5
70	47.81	16.37	782.8	626.3	2.235	2676	6158	81.37	8.0
75	47.74	19.55	933.3	735.3	2.495	2814	6856	80.01	7.5
80	47.65	22.97	1094.5	846.5	2.740	2950	7571	78.4	7.0
85	47.45	26.55	1260.0	958.3	2.971	3081	8197	76.77	6.6
90	47.27	31.06	1467.9	1083.2	3.237	3196	8940	74.19	6.1
95	47.1	35.49	1671.7	1193.3	3.453	3300	9600	71.52	5.8
100	46.91	41.72	1956.9	1322.3	3.708	3405	10284	68.88	5.4

MAD M8C10 EEE 100KV **FLUXER** PRO 29x8.7 MATT **AMPX** 60A (5-14S) HV **12S** MAX 80˚C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.06	1.58	75.7	55.3	0.409	1290	1154	73.57	15.4
35	48.04	2.42	116.3	89.7	0.568	1507	1624	77.45	14.0
40	48.01	3.33	159.6	125.1	0.706	1691	2053	78.62	12.9
45	47.98	4.35	208.5	166.7	0.852	1869	2504	81.81	12.3
50	47.94	5.65	271.0	221.0	1.031	2047	3059	83.28	11.5
55	47.89	7.32	350.8	287.7	1.227	2239	3600	83.68	10.5
60	47.84	9.33	446.5	368.2	1.448	2428	4247	83.98	9.7
65	47.78	11.5	549.3	452.0	1.660	2600	4869	83.65	9.0
70	47.7	13.81	658.8	540.0	1.866	2763	5475	83.22	8.4
75	47.63	16.49	785.4	637.9	2.090	2915	6160	82.34	8.0
80	47.57	19.35	920.6	742.2	2.313	3064	6844	81.58	7.5
85	47.48	22.48	1067.6	850.9	2.530	3212	7439	80.5	7.0
90	47.37	26.48	1254.3	981.5	2.808	3338	8302	78.85	6.7
95	47.25	30.29	1431.0	1100.2	3.030	3467	8948	77.27	6.3
100	47.09	35.87	1689.2	1257.1	3.316	3620	9785	74.54	5.8

MAD M8C10 EEE 100KV **FLUXER** CB2 29x9.6 MATT **AMPX** 60A (5-14S) HV **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	48.07	1.61	77.3	56.5	0.418	1290	1261	73.51	16.4
35	48.04	2.39	114.9	87.1	0.549	1514	1681	76.17	14.7
40	48.01	3.31	158.9	123.3	0.693	1698	2156	77.91	13.6
45	47.99	4.35	208.9	164.8	0.842	1870	2629	80.21	12.8
50	47.95	5.68	272.5	221.0	1.025	2059	3157	82.85	11.8
55	47.9	7.41	355.0	291.4	1.235	2253	3780	83.7	10.9
60	47.85	9.43	451.1	371.8	1.454	2442	4445	83.95	10.0
65	47.77	11.61	554.9	457.1	1.673	2610	5037	83.78	9.2
70	47.7	14.01	668.3	547.9	1.889	2770	5645	83.24	8.6

75	47.64	16.49	785.5	637.3	2.681	2924	6080	82.24	7.9
80	47.57	19.39	922.6	740.1	2.307	3063	6742	81.19	7.4
85	47.48	22.44	1065.5	846.8	2.515	3215	7374	80.26	7.0
90	47.37	26.09	1235.8	968.5	2.764	3346	8181	78.95	6.7
95	47.27	29.91	1413.8	1086.2	2.981	3480	8855	77.26	6.3
100	47.48	35.67	1693.5	1251.0	3.287	3635	9656	74.6	5.8

MAD M8C10 EEE 100KV **FLUXER** CB2 30x10 MATT **AMPX** 60A (5-14S) HV **12S** MAX 82°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.09	1.59	76.3	56.6	0.419	1289	1273	74.89	16.9
35	48.06	2.39	115.1	88.0	0.555	1513	1706	76.87	14.9
40	48.05	3.27	157.3	122.6	0.690	1696	2164	78.21	13.8
45	48.03	4.34	208.5	165.1	0.844	1869	2689	79.39	12.9
50	48	5.73	275.2	223.5	1.040	2053	3283	81.64	12.0
55	47.97	7.47	358.4	292.1	1.247	2237	3848	83.23	11.0
60	47.92	9.43	452.1	370.8	1.460	2425	4445	83.68	10.0
65	47.9	11.55	553.4	453.7	1.669	2596	5123	83.59	9.4
70	47.85	13.98	668.8	544.7	1.887	2756	5800	82.93	8.8
75	47.82	16.66	796.7	645.7	2.119	2910	6400	82.44	8.2
80	47.77	19.42	927.6	743.9	2.324	3057	6969	81.5	7.6
85	47.52	22.62	1074.9	853.7	2.543	3206	7599	80.29	7.2
90	47.41	26.24	1243.9	972.2	2.781	3338	8243	78.83	6.7
95	47.4	30.08	1425.7	1090.7	3.002	3469	9064	77.13	6.4
100	47.08	35.51	1671.4	1249.7	3.287	3630	9862	74.87	5.9

MAD M8C10 EEE 100KV **FLUXER** PRO 30x10 MATT **AMPX** 60A (5-14S) HV **12S** MAX 90°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.07	1.81	86.9	62.6	0.471	1269	1377	72.49	16.0
35	48.05	2.74	131.6	100.1	0.639	1496	1876	76.33	14.3
40	48.02	3.73	179.3	138.0	0.788	1672	2352	77.04	13.1
45	48	4.99	239.5	189.1	0.976	1850	2912	79.29	12.2
50	47.97	6.42	307.8	248.0	1.172	2021	3419	82.3	11.4
55	47.92	8.31	398.4	322.8	1.400	2201	4081	82.66	10.5
60	47.89	10.56	505.6	409.6	1.641	2383	4721	82.54	9.5
65	47.85	12.99	621.7	503.9	1.883	2556	5425	82.53	8.9
70	47.79	15.82	755.9	607.7	2.146	2704	6132	81.74	8.3
75	47.74	18.77	895.9	712.4	2.390	2846	6803	80.76	7.7
80	47.69	22.15	1056.4	826.0	2.646	2981	7523	79.32	7.2
85	47.62	25.51	1214.8	933.4	2.862	3115	8118	77.84	6.8
90	47.55	29.73	1413.8	1059.5	3.128	3234	8813	75.79	6.3
95	47.16	33.96	1601.7	1170.3	3.331	3355	9442	73.29	5.9
100	47	40.18	1888.6	1311.9	3.605	3475	10158	69.94	5.4

MAD M8C10 EEE 100KV **FLUXER** CB2 32x12 MATT **AMPX** 60A (5-14S) HV **12S** MAX 106°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	2.26	108.9	91.7	0.721	1215	1824	84.57	16.8
35	48.12	3.69	177.4	146.7	0.979	1430	2493	82.9	14.1
40	48.1	5.04	242.5	198.8	1.194	1590	3075	82.06	12.7
45	48.09	6.73	323.6	265.1	1.453	1742	3712	82	11.5
50	48.05	8.55	410.9	336.2	1.697	1892	4391	81.9	10.7
55	48.02	11.02	529.4	426.7	1.988	2049	5148	80.61	9.7
60	48	14.05	674.4	526.5	2.282	2203	5908	78.08	8.8
65	47.94	17.03	816.5	637.3	2.608	2333	6730	78.07	8.2
70	47.73	19.95	952.0	747.4	2.895	2466	7464	78.51	7.8
75	47.57	24.89	1183.9	862.2	3.203	2571	8246	72.91	7.0
80	47.03	27.61	1298.4	960.0	3.419	2681	8918	73.93	6.9
85	46.96	30.81	1446.8	1046.7	3.631	2753	9393	72.34	6.5
90	46.56	35.69	1661.6	1118.9	3.792	2818	9753	67.35	5.9
95	46.28	41.98	1943.0	1168.7	3.896	2864	10058	60.14	5.2
100	45.94	45.47	2089.1	1223.5	4.007	2915	10507	58.54	5.0

MAD M8C10 EEE 100KV **FLUXER** PRO 32x9.6 MATT **AMPX** 60A (5-14S) HV **12S** MAX 99°C

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N×m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	48.09	2.05	98.8	75.0	0.581	1234	1585	76.2	16.1
35	48.05	3.28	157.7	125.9	0.827	1453	2247	79.99	14.3
40	48.02	4.35	208.9	172.8	1.021	1616	2794	82.96	13.4
45	47.98	5.72	274.6	227.7	1.221	1781	3331	83.04	12.1
50	47.93	7.33	351.2	294.8	1.453	1938	3919	84.03	11.2
55	47.84	9.48	453.5	379.2	1.720	2105	4654	83.66	10.3
60	47.75	11.93	569.6	480.7	2.031	2260	5558	84.41	9.8
65	47.65	14.92	711.1	583.3	2.311	2410	6314	82.06	8.9
70	47.6	18.16	864.5	696.7	2.615	2544	7112	80.59	8.2
75	47.45	20.99	996.0	810.3	2.895	2673	7892	81.34	7.9
80	47.31	25.04	1184.5	914.7	3.130	2791	8519	77.22	7.2
85	47.04	29.31	1378.7	1029.7	3.408	2885	9246	74.66	6.7
90	46.87	33.62	1575.9	1121.9	3.597	2979	9805	71.17	6.2
95	46.64	36.88	1719.8	1199.2	3.770	3038	10247	69.71	6.0
100	46.18	43.09	1989.9	1320.9	4.030	3130	10625	66.4	5.3

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 43A is non-working zone,15-43A is short-term (about 10-30s), working zone, and below 15A 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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