



HB110 72X31 drone arm set Heavy load brushless motor

Our Product Introduction

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Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: HB110 72X31
- Price: Negotiable
- Delivery Time: 6-8
- Payment Terms: T/T
- Supply Ability: 100



Product Specification

- Motor Model: M90C60 EEE V1.0
- Motor Size: D:257x123 Mm
- Internal Resistance: 40.5 MΩ
- No Load Current: 1.44A/ 40V
- Motor Weight: 12.7 Kg
- Recommended Continue Thrust: 110 Kg
- Nominal Voltage: 354V-400V
- Maximum Current: 139.5 A
- Maximum Power: 55609W
- Maximum Thrust: 201 Kg
- Highlight: HB110 72X31 drone arm set,
Heavy load drone arm set



More Images



Product Description

HB110 72X31 drone arm set Heavy load brushless motor

HB(hummingbird)drone arm set (motor, ESC, propeller) is not sold separately as it is an integrated combo with the FOC ESC included. Each rotor provides a continuous thrust of 110kg(242.5bL) and has a maximum power output of and has a maximum power output of 55 KW, equivalent to 74 hp. The combo is specifically designed for large multi-rotor/e-VTOL drones capable of carrying heavy loads, flying car, delivery drone, urban mobility.

ESC Model	SineSic Pro 160A 30KW(150V~435V)	Weight	1895g
Size(L*W*H)	212.5*120.0*68.0 mm	Continuous Current	160A (under good cooling)
Protection Level	IP67	Instant Current	320A (under good cooling)
Recommended Battery	96~100S LiPO	PWM Input signal Voltage	3.3V/5V
Cable Length(input)	675 mm (10AWG Silicone Flexible Wire)	Cable Length(signal)	1245 mm (9-Core Pvc Flexible Wire)
Cable Length(output)	600 mm(10AWG silicone Flexible Wire)	Cable Length(LED wire)	155 mm (4-Core Pvc Flexible Wirewith Waterproof Connector)

The drone arm set with great weight to power ratio is specially designedfor high-capacity multi-rotor,e-VTOL application,very suitable for heavypayload lifting drones.

The recommended operating voltage range 100-600V.

This propulsion system unit with motor,ESC,propeller and its compatibility to serve well inlarge-scale aircraft with optimal power

Utilizing high-quality aviation-grade aluminum enhances both safety measures and utilization of durability

Stable rotation and anti-fall properties quaranteed by Japanese bearing.

Moreover, the incorporation of high-performance curved maanets and resistant to elevated temperatures which resulting in a remarkableperformance increase by 5%



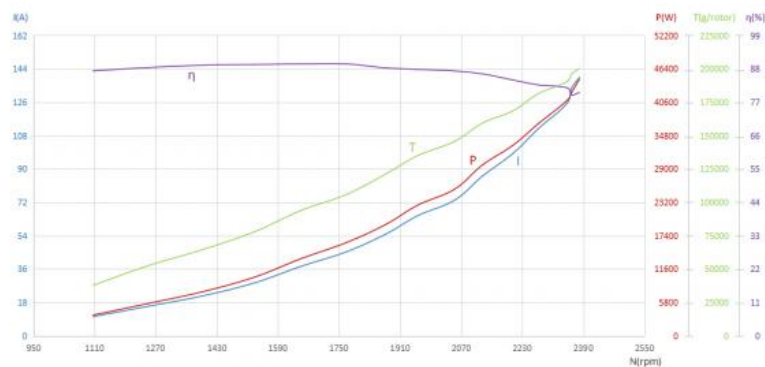
Hummingbird HB110 CB2 PROP 72x31 MATT SineSic Pro 160A 30KW (150V-435V)

400V

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 400 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



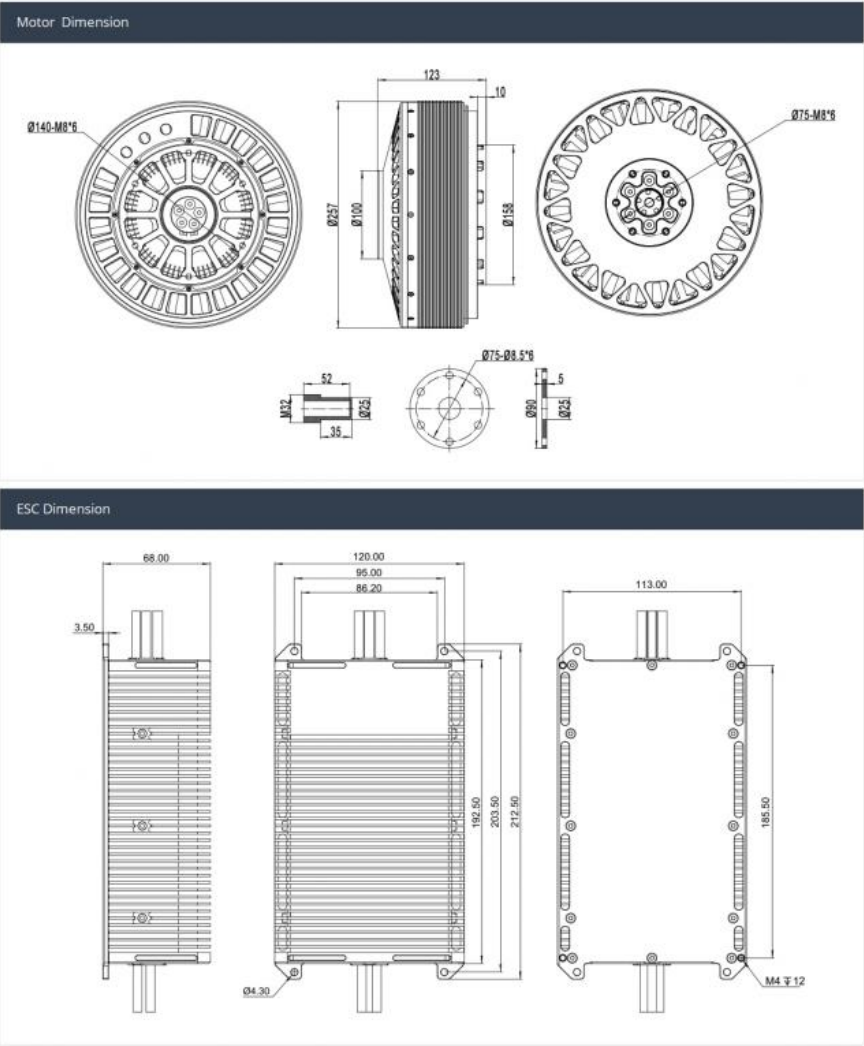
BASIC PARAMATER

Motor Data			
Motor Model	MAD M90C60 EEE V1.0	Nominal Voltage	354V-400V
RPM/V	9 KV	Cable Length	250 mm (extended Enameled wires)
Motor Size	Ø:257 × 123 mm	Maximum Current	139.5 A
Internal resistance	40.5 mΩ	Maximum Power	55609W
No Load Current	1.44A / 40V	Maximum thrust	201 kg
Motor Weight	12.7 kg	Shaft Diameter	IN: 35 mm
Recommended Continue thrust	110 kg	Stator	TAIWAN / Anticorrosive

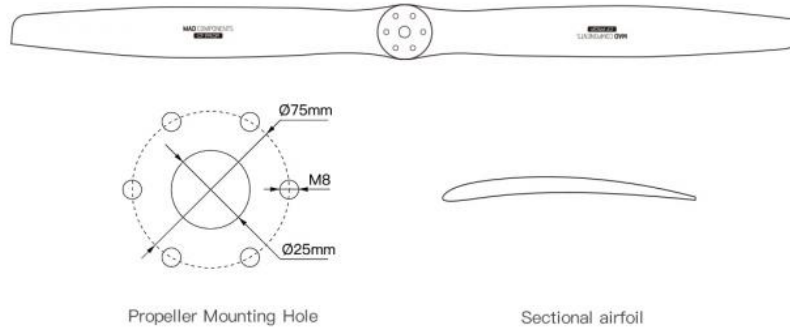
ESC Data			
ESC Model	SineSic Pro 160A 30KW (150V~435V)	Weight	1895g
Size(L*W*H)	212.5*120.0*68.0 mm	Continuous Current	160A (under good cooling)
Protection Level	IP67	Instant Current	320A (under good cooling)
Recommended Battery	96~ 100S LiPo	PWM Input Signal Voltage	3.3V/5V
Cable Length(input)	685mm	Cable Length(Signal)	1175mm
Cable Length(output)	A:255mm / B:285mm / C:325mm	Cable Length(LED wire)	145 mm

Propellers Data			
Propellers Model	CB2 72X31 MATT (1828.8 x 787.4mm)	Single Weight	1080 g
Material	High quality carbon fiber + Resin	Type	fixed

PRODUCT DRAWING



Propellers Dimension



TEST DATA

Hummingbird **HB110** CB2 PROP 72x31 MATT SineSic Pro 160A 30KW (150V~435V)

354V

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N·m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	353.69	11.94	4223.1	3722.8	32.318	1100	38132	88.2	9.0
35	353.63	17.22	6089.5	5440.9	41.400	1255	50974	89.3	8.4
40	353.61	24.73	8744.8	7802.1	53.370	1396	65229	89.2	7.5
45	353.65	32.35	11440.6	10256.7	64.268	1524	77400	89.7	6.8
50	353.61	40.63	14367.2	12926.4	74.675	1653	88799	90	6.2
55	353.53	49.85	17623.5	15791.1	85.339	1767	104749	89.6	5.9
60	353.54	60.93	21541.2	19180.5	97.842	1872	118748	89	5.5
65	353.51	72.74	25714.3	22698.6	110.140	1968	134255	88.3	5.2
70	353.39	83.41	29476.3	25959.0	120.335	2060	144578	88.1	4.9
75	353.41	97.79	34560.0	29911.6	133.474	2140	158014	86.5	4.6
80	353.4	111.75	39492.4	33693.7	144.933	2220	170431	85.3	4.3
85	353.26	131.27	46372.4	38383.2	160.760	2280	183080	82.8	3.9
90	353.23	146.61	51787.1	42240.5	172.379	2340	194407	81.6	3.8
95	353.22	151.81	53622.3	43387.9	174.673	2372	194858	80.9	3.6
100	353.23	150.8	53267.1	42694.9	172.757	2360	192735	80.2	3.6

Hummingbird **HB110** CB2 PROP 72x31 MATT SineSic Pro 160A 30KW (150V~435V)

400V

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N·m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	399.37	10.28	4105.5	3584.5	30.949	1106	37713	87.3	9.2
35	399.39	15.8	6310.4	5576.2	42.633	1249	52294	88.4	8.3
40	399.41	21.56	8611.3	7678.8	52.564	1395	64712	89.2	7.5
45	399.31	28.46	11364.4	10159.0	63.489	1528	77799	89.4	6.8
50	399.31	37.5	14974.1	13419.4	77.570	1652	94009	89.6	6.3
55	399.32	45.22	18057.3	16177.6	87.329	1769	105734	89.6	5.9
60	399.29	54.85	21901.1	19348.8	98.648	1873	121243	88.3	5.5
65	399.19	64.82	25875.5	22714.3	110.836	1957	135071	87.8	5.2
70	399.24	72.99	29140.5	25427.1	118.329	2052	145502	87.3	5.0
75	399.16	86.31	34451.5	29741.9	133.528	2127	159487	86.3	4.6
80	399.14	98.38	39267.4	33115.5	143.350	2206	168537	84.3	4.3
85	399.06	111.66	44559.0	36852.4	154.892	2272	181329	82.7	4.1
90	399.04	125.57	50107.5	40936.6	166.489	2348	190526	81.7	3.8
95	398.9	133.75	53352.9	42354.6	171.380	2360	196373	79.4	3.7
100	398.6	139.51	55608.7	44598.2	178.955	2380	200164	80.2	3.6

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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