



**Advanced BLDC & UAV Motor Solutions
for Modern Applications**

MECWIN TECHNOLOGIES INDIA PVT.LTD



ABOUT US

Who we are

Mecwin Technologies specializes in delivering comprehensive turnkey solutions for the design, development, and manufacturing of high-performance UAV and drone motors.

From small-scale systems to high-capacity propulsion units, we offer cutting-edge solutions tailored to meet the evolving demands of the unmanned aerial vehicle industry.

With a strong focus on innovation, reliability, and customization, Mecwin is your trusted partner in powering the future of aerial mobility

What we offer

Mecwin have got in-house expertise to design and manufacture various types of BLDC motors . We also under take complete customized motor design and manufacturing from the concept. Some of our products range for the different applications follow”-

- UAV Motors
- Drones
- Aerospace and Defence Motor
- Medical Application Motors
- Material Handling Motors
- Agriculture Aplication Motors
- Automative Motor
- Home Appliances Motors

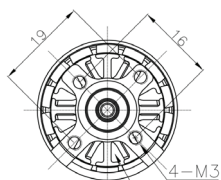
FPV racing drones



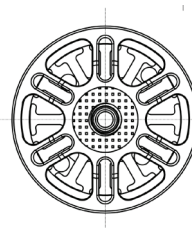
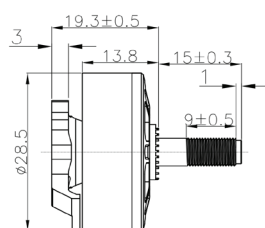
Success Project



Product Drawing



20AWG/150MM



Specification

Test Item	1750KV/2350KV/2700KV	Weight	33.6g
Motot Dimensions	28.5mm*17.5mm	Internal Resistance	55m Ω
Lead	20#AWG 150mm	Configuration	12N14P
Shaft Diameter	5mm	Rated Voltage(LiPo)	3-6S
Ideal Current	1.36A	Peak Current	42A
Max Powers	900W		

Test Report

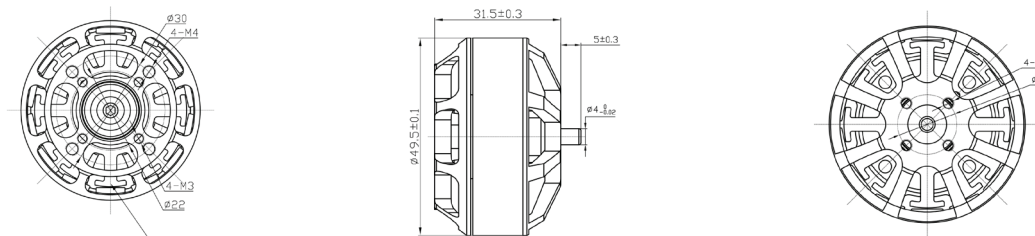
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Tempeture
6S	5 inch	10%	0.2	4.8	34		7.08	48℃
		20%	0.9	21.6	116		5.37	
		30%	2.0	48.0	222		4.63	
		40%	3.8	91.2	362		3.97	
		50%	6.1	146.4	478		3.27	
		60%	9.3	223.2	622		2.79	
		70%	14.0	324.8	816		2.51	
		80%	18.8	421.1	1014		2.41	
		90%	26.2	576.4	1276		2.21	
		100%	40.3	882.5	1670		1.82	



Fixed-wing drone



Product Drawing



Specification

Test Item	650KV	Weight	149.2g
Motot Dimensions	49.5mm*36.5mm	Internal Resistance	48m Ω
Cable Lead	90mm	Configuration	12N14P
Shaft Diameter	4mm	Rated Voltage(LiPo)	6S
Ideal Current	1.24A	Peak Current	35A
Max Powers	900W		

Test Report

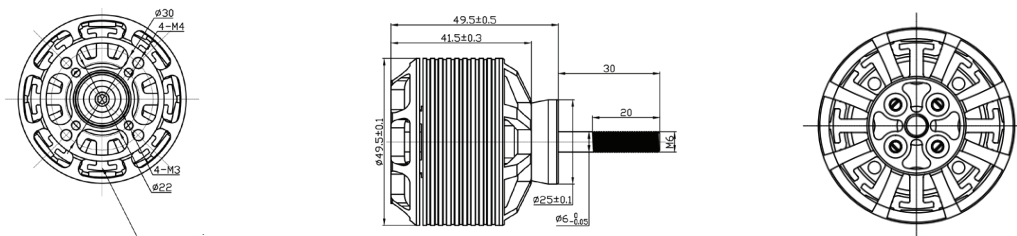
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
24V	15x8	20%	0.7	16.8	202		12.0	48℃
		30%	1.8	43.2	438		10.1	
		40%	3.4	81.6	714		8.7	
		50%	6.2	148.8	1128		7.5	
		60%	9.9	237.6	1542		6.4	
		70%	14.2	340.8	1914		5.6	
		80%	20.6	494.4	2412		4.8	
		90%	26.3	631.2	2814		4.4	
		100%	33.3	799.2	3138		3.9	



Fixed-wing drone



Product Drawing



Specification

Test Item	240KV	Weight	236g
Motot Dimensions	49.5mm*49.5mm	Internal Resistance	104mΩ
Cable Lead	60mm	Configuration	12N14P
Shaft Diameter	6mm	Rated Voltage(LiPo)	12S
Ideal Current	0.64A	Peak Current	32A
Max Powers	1400W		

Test Report

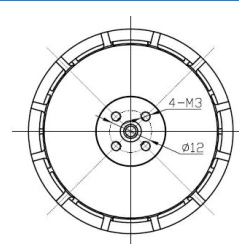
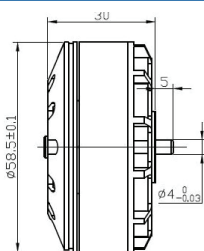
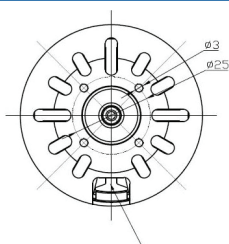
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
44.4V 12S 240KV	APC1655	10%	0.2	8.88	200		22.52	48℃
		20%	0.4	17.76	300		16.89	
		30%	0.9	39.96	500		12.51	
		40%	2.4	106.56	1000		9.38	
		50%	5.8	257.52	2000		7.77	
		60%	8.8	390.72	2600		6.65	
		70%	11.2	497.28	3000		6.03	
		80%	13.9	617.16	3760		6.09	
		90%	17.9	794.76	4000		5.03	
		100%	30.7	1363.08	5800		4.26	



Multicopter drone



Product Drawing



Specification

Test Item	288KV	Weight	192g
Motot Dimensions	58.5mm*30mm	Internal Resistance	95m Ω
Cable Lead	60mm	Configuration	12N14P
Shaft Diameter	4mm	Rated Voltage(LiPo)	6S
Ideal Current	0.3A@10V	Peak Current	25A
Max Powers	650W		

Test Report

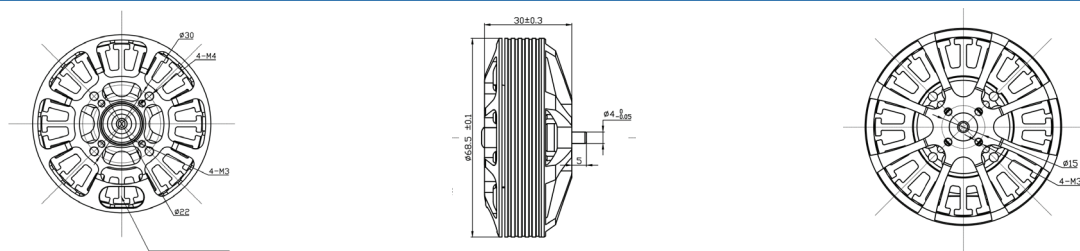
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
22V 6S 288KV	1855	40%	2	44.4	650		14.64	52 °C
		50%	6	133.2	1380		7.82	
		60%	18	399.6	2850		7.00	
		80%	20	444.0	3060		6.33	
		100%	22	488.4	3380		5.91	
	2055	40%	2	44.4	700		8.81	58 °C
		50%	6	133.2	1540		7.34	
		60%	18	399.6	3210		6.57	
		80%	22	488.4	3610		5.85	
		100%	23.1	512.8	3800		5.47	



Fixed Wing Drone



Product Drawing



Specification

Test Item	340KV	Weight	236g
Motot Dimensions	68.5mm*30mm	Internal Resistance	104mΩ
Cable Lead	90mm	Configuration	36N40P
Shaft Diameter	4mm	Rated Voltage(LiPo)	6S
Ideal Current	0.64A@10V	Peak Current	42A
Max Powers	1000W		

Test Report

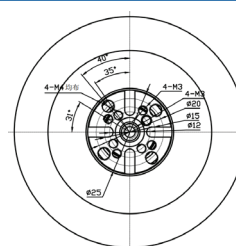
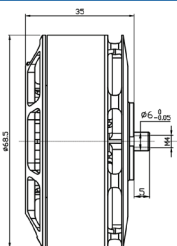
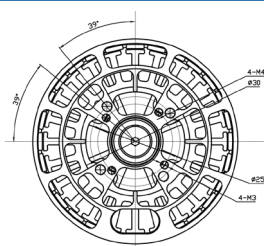
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
24V 6S 370KV	XOAR 1865	10%	0.52	12.48	180		14.42	48℃
		20%	0.80	19.20	260		13.54	
		30%	1.80	43.20	528		12.22	
		40%	4.10	98.40	1002		10.18	
		50%	7.00	168.00	1506		8.96	
		60%	11.4	273.60	2118		7.74	
		70%	17.1	410.40	2822		6.88	
		80%	23.2	556.80	3472		6.24	
		90%	31.8	763.20	4256		5.58	
		100%	41.5	996.00	5070		5.09	



Agriculture Drone



Product Drawing



Specification

Test Item	180KV	Weight	331.5g
Motot Dimensions	68.5mm*35mm	Internal Resistance	51.2m Ω
Cable Lead	90mm	Configuration	24N28P
Shaft Diameter	6mm	Rated Voltage(LiPo)	12S
Ideal Current	1.17A@10V	Peak Current	66A
Max Powers	3200W		

Test Report

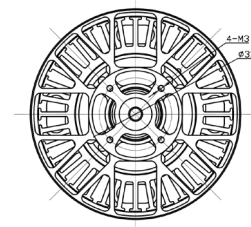
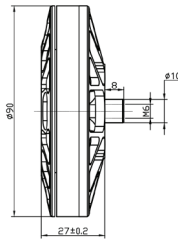
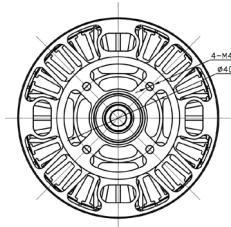
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
48V 12S 180KV	APC2260	10%	0.30	14.40	212		14.72	48 °C
		20%	1.10	52.80	686		12.99	
		30%	2.70	129.60	1482		11.44	
		40%	5.80	278.40	2550		9.16	
		50%	10.70	513.60	3968		7.73	
		60%	17.60	844.80	5682		6.73	
		70%	24.80	1190.40	7166		6.02	
		80%	35.30	1694.40	8858		5.23	
		90%	47.00	2256.00	10596		4.70	
		100%	64.50	3096.00	12870		4.16	



Agriculture Drone



Product Drawing



Specification

Test Item	180KV	Internal Resistance	85mΩ
Shaft Diameter	6mm	Configuration	36N40P
Motor Dimensions	92mm*49.5mm	Cable Length	90mm
Weight including Cables	295.6g	No. of Cells (LiPo)	12S
Idle Current @10V	0.95A	Max Power	1500W
Max Current	40A		

Test Report

Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
44.4V 12S,100KV	JXF3095	10%	0.1	4.44	118		26.58	48℃
		20%	0.5	22.2	524		23.60	
		30%	1.3	57.72	1108		19.20	
		40%	2.7	119.88	1830		15.27	
		50%	4.6	204.24	2690		13.17	
		60%	9.0	399.60	4012		10.04	
		70%	13.5	599.40	5224		8.72	
		80%	18.3	812.52	6280		7.73	
		90%	24.3	1078.92	7408		6.87	
		100%	32.9	1460.76	8656		5.93	



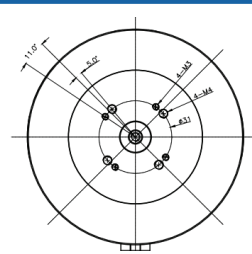
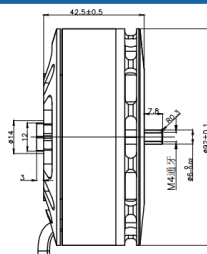
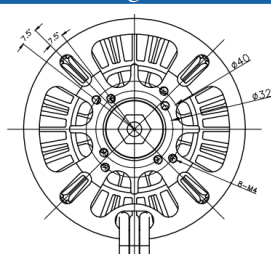
Agriculture Drone



Success Project



Product Drawing



Specification

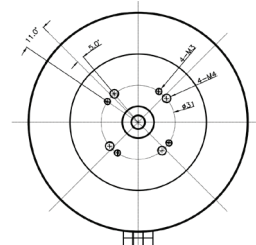
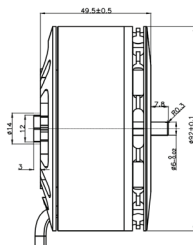
Test Item	120KV	Internal Resistance	27m Ω
Shalft Diameter	6mm	Configuration	36N40P
Motor Dimensions	42.5mm*92mm	Cable Length	90mm
Weight including Cables	672g	No. of Cells (LiPo)	12S
Idle Current @10V	1.45A@10V	Max Power	3500W
Max Current	80A		

Test Report

Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
48V 12S,120KV	JXF3095	10%	0.5	24	400		16.67	48 C
		20%	1.2	57.6	848		14.72	
		30%	3.2	153.6	1986		12.93	
		40%	7.2	345.6	3652		10.57	
		50%	13.7	657.6	5714		8.69	
		60%	20.9	1003.2	7558		7.53	
		70%	30.6	1468.8	9810		6.68	
		80%	39.5	1896	11596		6.12	
		90%	52.9	2539.2	13986		5.51	
		100%	68	3264	16386		5.02	



Agriculture Drone



Test Item	120KV	Internal Resistance	27m Ω
Shalft Diameter	6mm	Configuration	36N40P
Motor Dimensions	49.5mm*92mm	Cable Length	90mm
Weight including Cables	850g	No. of Cells (LiPo)	12S
Idle Current @10V	1.84A@10V	Max Power	4000W
Max Current	120A		

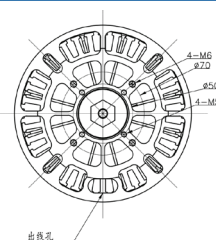
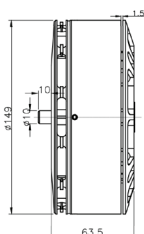
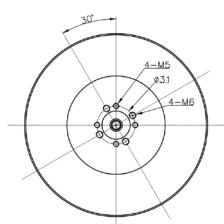
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
48V 12S, 120KV	F3211	10%	0.4	19.2	425		22.14	48 C
		20%	1.7	81.6	1300		15.93	
		30%	4.5	216.0	2850		13.19	
		40%	9.0	432.0	4880		11.30	
		50%	16.6	796.8	7020		8.81	
		60%	27.0	1296.0	10110		7.80	
		70%	40.0	1920.0	13230		6.89	
		80%	53.0	2544.0	16540		6.50	
		90%	72.0	3456.0	19000		5.50	
		100%	78.0	3744.0	19890		5.31	



Passenger Drone



Product Drawing



Specification

Test Item	60KV	Internal Resistance	11.2mΩ
Shaft Diameter	10mm	Configuration	36N40P
Motor Dimensions	149mm*63.5mm	Cable Length	150mm
Weight including Cables	2620g	No. of Cells (LiPo)	24S
Idle Current @10V	4.7A@10V	Max Power	18000W
Max Current	180A		

Test Report

Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
96V 24S, 60KV	40 inch	10%	1.0	96	1676		17.46	58℃
		20%	5.0	480	5442		11.34	
		30%	12.0	1152	9928		8.62	
		40%	26.0	2496	17152		6.87	
		50%	45.0	4320	24360		5.64	
		60%	66.0	6336	32336		5.10	
		70%	73.0	7008	33932		4.84	
		80%	103.0	9888	41836		4.23	
		90%	145.0	13920	48722		3.50	
		100%	179.0	17184	53925		3.14	

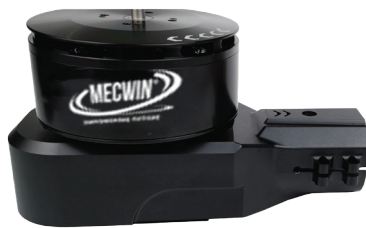


Success Project

Quadcopter Drone



Including



Motor

ESC

Propeller

Specification

Max. Thrust	16.3kg/Axis	Motor Size	92*42.5mm	Throttle Signal Frequency	50-500HZ
Recommended LiPo Battery	12S LiPo	KV Rating	120KV	Operating Pulse Width	1140us-1940us
Recommended Takeoff Weight	5.7-7.5kg/Axis	O.D of Carbon Fiber Tube	40mm	Max. Input Voltage	52.2V
Combo Weight	1182g	Bearing	EZO	Max. Input Current (Cont.)	80A
Waterproof Rating	IP67	ESC LiPo Battery	12-14S	Max. Peak Current (10s)	100A

Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
48V 12S, 120KV	JXF3095	10%	0.5	24.0	400		16.67	48 °C
		20%	1.2	57.6	848		14.72	
		30%	3.2	153.6	1986		12.93	
		40%	7.2	345.6	3652		10.57	
		50%	13.7	657.6	5714		8.69	
		60%	20.9	1003.2	7558		7.53	
		70%	30.6	1468.8	9810		6.68	
		80%	39.5	1896.0	11596		6.12	
		90%	52.9	2539.2	13986		5.51	
		100%	68.0	3264.0	16386		5.02	



Drone motor with a propeller



Including



Motor

ESC

Propeller

Specification

Max. Thrust	19.89kg/ Axis	Motor Size	92*42.5mm	Throttle Signal Frequency	50-500HZ
Recommended LiPo Battery	12S LiPo	KV Rating	120KV	Operating Pulse Width	1140us-1940us
Recommended Takeoff Weight	9kg/ Axis	O.D of Carbon Fiber Tube	40mm	Max. Input Voltage	52.2V
Combo Weight	1360g	Bearing	EZO	Max. Input Current (Cont.)	80A
Waterproof Rating	IP67	ESC LiPo Battery	12-14S	Max. Peak Current (10s)	100A

Test Report

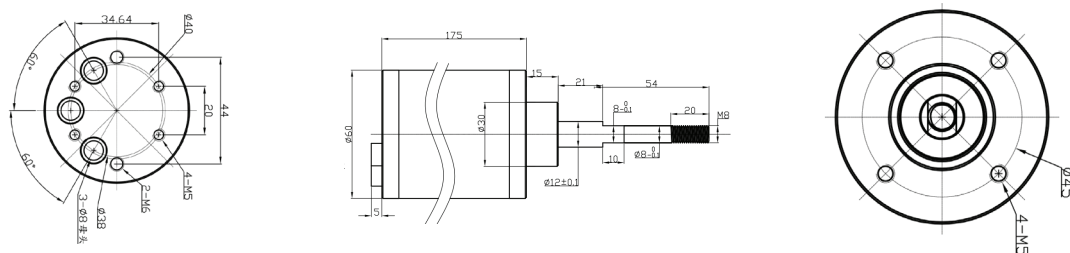
Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
48V 12S, 120KV	F3211	10%	0.4	19.2	425		22.14	48 C
		20%	1.7	81.6	1300		15.93	
		30%	4.5	216.0	2850		13.19	
		40%	9.0	432.0	4880		11.30	
		50%	16.6	796.8	7020		8.81	
		60%	27.0	1296.0	10110		7.80	
		70%	40.0	1920.0	13230		6.89	
		80%	53.0	2544.0	16540		6.50	
		90%	72.0	3456.0	19000		5.50	
		100%	78.0	3744.0	19890		5.31	



Fixed Wing Drone - Electric Jet Surfboard



Product Drawing



Specification

Brand	FlashEagle	Model	R60180
Motor Dimension	60x180mm	Shaft Diameter of Propeller Adapter	M8
Propeller mounting holes	4*M5-45mm	Motor mounting holes	4*M5-20X34.6+2*M6-44
Configuration	12N4P	Rated Voltage	48V
Rated Current	60A	Rated Power	2880W
Max Continuous Current	200A	Max Continuous Power	9600W
Idle Current	5A	Motor Efficiency	90%
No. of Celles (Lipo Battery)	4S~12S LiPo	Motor Cable Length	1.2m
Internal Resistance	28mΩ	Max Thrust Range	50KG
Water & Dust Proof	IP68	ESC(Recommended only)	6~12S 300A
Propeller (Recommended Only)	130~150mm		

Test Report

Voltage(V)	Propeller	Throttle	Current(A)	Power(W)	Thrust(G)	RPM	Efficiency	Temperature
44.4V	130mm	40%	57.0	1259.7	24480	2200	19.43	50 C
12S, 5000RPM		100%	165.0	3646.5	59860	3500	16.42	

Success Project Picture



Product Picture



Agriculture Drone



Success Project



Specification

Endurance	15~20min (Spraying)	Control Model	Auto, GPS
Power System	FlashEagle U9	Working Efficiency	10~15mu/ Flight
Tank Capacity	16L	Unfolded Dimension	1500x1500x600mm
Folded Dimension	650x650x590mm	Package Dimension	600x600x420mm
Net Weight	11KG	Take-Off Weight	34KG
Spray Width	4~6m	LiPo Battery	22Ah 12S 20C

Flight mode and functions

Attitude - stabilization mode, Attitude - fixed height mode, GPS - speed mode, GPS - angle mode, AB point mode, automatic return mode, out of control return mode, low voltage protection, Breakpoint continuous spray function, one button Traverse function, Water pump control function, Terrain following function, Emergency stop function, GPS speed switching function, support for App ground station, support remote control tuning setting by data link.

Product Picture



Agriculture Drone



Specification

Endurance	15~20min (Spraying)	Control Model	Auto, GPS
Power System	FlashEagle U9	Working Efficiency	15~20mu/ Flight
Tank Capacity	20L	Unfolded Dimension	1800x1800x620mm
Folded Dimension	950x950x620mm	Package Dimension	600x600x420mm
Net Weight	18.5KG	Take-Off Weight	46KG
Spray Width	4~6m	LiPo Battery	26Ah 12S 20C

Flight mode and functions

Attitude - stabilization mode, Attitude - fixed height mode, GPS - speed mode, GPS - angle mode, AB point mode, automatic return mode, out of control return mode, low voltage protection, Breakpoint continuous spray function, one button Traverse function, Water pump control function, Terrain following function, Emergency stop function, GPS speed switching function, support for App ground station, support remote control tuning setting by data link.

Product Picture



Success Project

Fix Wing Drone



Specification

Wingspan	3200mm	Length	1750mm
Frame Weight	6.35kg	RTF Weight	9kg(w/o battery, payload)
Max take-off weight	21kg	Endurance	2.5 hours(with 2kg payload)
Suggest Max. Payload	5kg	Cruising speed	22m/s
Battery (VTOL mode)	2x 6S 8000mAh Lipo	Battery (fixedwing mode)	4x6S 16000mAh Li-ion
Take-off/Landing	VTOL	Quick-detach	Yes
Material	Glass fiber and kevlar	Application	3D modeling, ground survey

Option

4x 6S 16000mAh Li-ion battery(Fixedwing mode)

2x 6S 8000mAh Lipo battery(VTOL mode)

FlashEagle 3DM V3 Oblique Camera for Mapping and Survey

FlashEagle 30X Optical Zoom Camera with 2-axis Gimbal

Taranis X9D Plus 2019 Radio Controller



Contact Us :



Manufacturing Unit :

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